# HOUSTON COMMUNITY COLLEGE COLEMAN COLLEGE FOR HEALTH SCIENCES 

PHYSICAL THERAPIST ASSISTANT PROGRAM<br>PHYSICAL AGENTS<br>PTHA 1431<br>SPRING TERM 2012<br>CRN 83071, 84938, 84939, 84940

This course is an introduction to physical therapy modalities and basic procedures that the students will encounter during their first clinical experiences. This course will cover a time period of sixteen (16) weeks. Students will enroll for the complete period of instruction.

## COURSE DESCRIPTION

Biophysical principles, physiological effects, intervention efficacy, and application of physical agents.

## END OF COURSE OUTCOMES

Describe the biophysical principles and efficacy of physical agents; relate indications, contraindications and precautions to interventions; apply physical agents; demonstrate communication skills.

PREREQUISITES: PTHA 1305, 1413, 1229, 1201, and HPRS 1106.

## REQUIRED TEXTBOOKS

1. Physical Agents, Theory and Practice, $2^{\text {nd }}$ Edition

Barbara Behrens, PTA, MS and Susan Michlovitz, PT, PhD, MS, CHT
2. Manual for Physical Agents, $6^{\text {th }}$ Edition

Karen Hayes, PhD, PT
3. Traction Handbook, Zimmer, Revised 12/20/00
4. Class Handouts

## REFERENCE TEXTBOOKS:

1. Thermal Agents in Rehabilitation, $3^{\text {rd }}$ Edition

Susan Michlovitz, MS, PT, CHT
2. Physical Agents in Rehabilitation, From Research to Practice, Michelle Cameron, PT, OCS
3. The Manual of Trigger Point and Myofascial Therapy, Kostopoulos, PT, PhD

## 4. Treatment of Spinal Dysfunction for Physical Therapist Assistants, Tehan, D.O., PT COURSE MATERIALS

Six DVD-R 8 cm
Lab clothes for practice and as patients for lab test
SPTA uniform for lab test

## ATTENDANCE REQUIREMENTS

Due to the fast pace of this course and the importance of the material for clinical performance, it is advisable that the student be present for all class times. Major segments of course content are missed when a student is absent.

## Attendance Statement of Commitment

Being on time, staying throughout the entire class, and exemplary attendance, go hand in hand with professionalism. Students who do not abide by the course attendance requirements show a lack of strong professional commitment. As a result, this will reflect on the faculty's perception of the student's readiness for clinical affiliations.

## Definitions:

$\checkmark$ Tardy:
A student arrives after the official start time of class through the first 15 minutes is considered tardy.
$\checkmark$ Leaving Early:
A student who leaves before the official end time of class or before class is dismissed by the lead instructor within the last 15 minutes of class will be considered leaving early.
$\checkmark$ Absent from class:
A student who arrives after the official start time of class greater than 15 minutes late will be considered absent.
A student who leaves class prior to the last 15 minutes of class will be considered absent A student who does not attend class will be considered absent
A student who has accumulated any combination of three tardies or three leaving earlies will have one absence.

## Calculating the Attendance Grade

## Students must attend $\mathbf{9 5 \%}$ of all lecture class meetings and $\mathbf{9 5 \%}$ of all lab class meetings.

Lecture attendance will be based on 14 scheduled class meetings:
3.25 points will be deducted for each tardy or leaving early

13 points will be deducted for each absence
Lab attendance will be based on 30 scheduled class meetings:
3.8 points will be deducted for each tardy or leaving early

9 points will be deducted for each absence
The student's final Grand Average grade for the course will be lowered based on tardies and non-
attendance.

Lecture attendance grade will lower the Grand Average as follows:
$74.4 \%-65.5 \%=10$ point deduction
$64.4 \%-59.5 \%=20$ point deduction
$59.4 \%-49.5 \%=30$ point deduction
Below $49.4 \%=$ Failure of course
Lab attendance grade will lower the Grand Average as follows:
$74.4 \%-65.5 \%=10$ point deduction
$64.4 \%-59.5 \%=20$ point deduction
$59.4 \%-49.5 \%=30$ point deduction
Below $49.4 \%=$ Failure of course

## PLAN OF INSTRUCTIONAL PRACTICES

## A. TEACHING METHODS

The material in this course will be taught by a combination of lecture, discussions, demonstrations, and practice by the students on each other. Each student must experience a procedure as "the patient" as well as apply the procedure to a fellow student as the SPTA. Students will be assigned lab partners who will be rotated periodically throughout the course. At times, students will work in larger groups. Students should be prepared for class by reading textbook materials appropriate to the subject being taught prior to class.

## B. INSTRUCTIONAL AIDS

Computerized power point presentations, textbooks, handouts, demonstration, models, films, computerized programs, overhead projectors, transparencies, dry erase board, and actual Physical Therapy equipment will be used in this course. During tests, the lab will be set up like an actual Physical Therapy Department. No instructional aids, especially actual P.T. equipment, may be used without permission of the instructor.

## C. 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. More advanced students may be assigned as lab partners to those who need additional assistance. Study groups are encouraged. Labs can be open upon request at other than classroom 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.

## D. SAFETY

Safety will be taught throughout the course during 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 modality in which there is a safety issue. Lab Skills practice and Lab Tests will be stopped immediately if students are in danger of injury to themselves or others. Each student will be apprised of fire exits, extinguisher, disaster
and fire drills. Equipment is calibrated and checked for electrical safety by an outside agency each year before the section of the course on such equipment begins.

## E. 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. Behavior in the classroom will be reflected on the Grading \& Course Requirement for Professional Performance at Mid Term and Final.

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 and functioning as part of a physical therapy department.

In order to accomplish the above, during the lab, the lab will be considered to be a hospital Physical Therapy department, each student will be considered to be a student PTA in the department, and his/her lab partner is to be addressed as and considered to be a patient. The instructors will be the supervising Physical Therapist or Physical Therapist Assistant and Clinical Instructor in charge of the department. Strict adherence to this policy will assure success in completing the required skills on the Professional Performance form.

During lab, instructors will evaluate and sign off on the performance of each student on the Outcome sheets based on the following criteria:
A. Was the student in appropriate lab clothing?
B. Did the student pay attention to the lab demonstration and discussion?
C. Did the student practice skills during the entire time allotted for practice?
D. Did the student demonstrate an attempt to use feedback from instructors and classmates to improve performance?
E. Did the student ask questions to clarify the discussion, demonstration, or feedback given by the instructors?

Five points will be deducted for each criteria which is not meet and documented by an Instructor.
Outcomes are part of Professional Performance and Grading Course Requirements. Outcomes must be signed off on the day of the lab class. No late signatures will be accepted. It is the student's responsibility to get a signature. The final overall grade for Outcomes will also be based on the total number of classed attended and documented by an instructor signature, plus the outcome criteria.

Clean-up of the lab is everyone's responsibility. Work areas must be clean prior to leaving the lab. All students must be responsible for adequate and sanitary work conditions in the lab. Students will be assigned specific duties in the lab on a rotating basis.

Extra assignments or volunteer services which can benefit the students will be mentioned in class. Students should volunteer to help the department as much as possible. Consider yourself as part of the Physical Therapy Team. It takes being a team worker to be a successful Physical Therapist Assistant!

## F. LAB DRESS REQUIREMENTS

Each student will be required to wear a lab uniform at all times during all 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.

For Males: Shorts which expose the hip joint and the upper thigh.
Students should be prepared for every lab by being in lab clothes PRIOR to the start of lab. Being dressed in appropriate lab clothes is part of your Grading \& Course Requirement for Participation. The student will be required to wear a patient gown during lab practice if not in correct lab clothes. "Cover-ups" must be worn over lab clothes. Lab attire is not allowed outside of the lab.

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. Video taping or recording of any kind of demonstrations or equipment is not allowed unless permission is given by the Instructor.

## G. LAB TEST REQUIREMENTS

As the SPTA during lab tests, each student must dress as if going to work in a clinic or hospital. Lab coats and professional attire and grooming will be required on lab tests.

Requirements:

1. Short sleeve polo shirt
2. Khaki pants
3. Flat shoes with closed toes \& heels, non-skid soles
4. Short fingernails
5. No dangling earring, diamond rings on fingers, excessive piercing
6. Long hair pulled back
7. Facial hair trimmed and neat

## GRADING POLICIES

A. GRADE RANGES:

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90-100 A
80-89 B
75-79 C
    0-74 F
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## B. WITHDRAWAL

The last day for administrative/student withdrawal is March 29, 2012. Any student not withdrawn by March 29, 2012 will receive the grade earned.

## C. SCORE COMPUTATION:

For individual tests, 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
Students will receive computerized grade summary reports during the semester. The Grade Guide "grand average" tabulation is a "weighted average" value. Recorded grades will reflect the program policy on score computation.

## D. ACADEMIC HONESTY

Students can be dismissed from the program for cheating on 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 is considered cheating.
- Sharing information about how you or someone else performed on a lab test BEFORE ALL lab tests 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 computerized program to look up answers during an exam.


## TESTING, GRADING \& COURSE REQUIREMENTS

The grand average grade for this course is based on the following components:
25\% Theory Exams
10\% Theory Final
25\% Lab Exams
25\% Lab Final
3\% Outcomes
2\% Mid Term Generic Abilities
2\% Final Generic Abilities
3\% Thermal Agents Homework
2\% Electrotherapy Homework
3\% Research Paper
$100 \%$
In order to pass the course a student must have:

- a $75 \%$ average grade or better for the final overall grade for theory exams which includes the weighted average of all theory exams and the final theory exam
- a $75 \%$ average grade or better for the final overall grade for lab exams which includes the weighted average of all lab tests and the lab final.

Homework and special projects, research papers, etc. will be included in the grade calculation only after it is determined that the theory portion (all section exams and the final) have been passed with $75 \%$ or better, the lab portion (all section exams and the final) have been passed with $75 \%$ or better. The final grand average is then calculated based on all grades listed in the section above: Testing, Grading \& Course Requirements.

## A. LAB EXAMS

Lab exams are given after each section of the course to check the student's progress in learning. Lab exams assume that any treatment is under the direction and supervision of the Physical Therapist. Grading of the lab exam is based on the lab skill criteria sheet.

All lab tests will have a time limit as determined by the instructor. All lab tests will be timed and must be completed in the allotted time. The CI will notify the student at the final 5 minute mark, and stop the test at the end of the allotted time. All points will be deducted from the total score of the portion of the skill not completed and deducted from the lab test grade.

Each student's lab exam is recorded. Each student will receive the finalized lab test DVD and is required to review it and self grade using the appropriate skill sheet in their handouts. The DVD and the graded skill sheet must be turned in by Friday of the same week of the lab test. Appropriate comments and score calculation of the grade should accurately reflect the student's skill grade as reviewed on the DVD. Points will be awarded under self critique and applied to your lab test grade. The DVD recording will be kept by the PTA Program until the student graduates.

Completion of each lab exam must be at a minimal level of $75 \%$ compliance with the skill criteria listed on the lab skill sheet(s) used for grading (Performance Checklist) and with critical skill criteria. Certain criteria are defined as Critical Skills and are noted with one or more asterisks on the lab skill grading sheets. Critical Skills are those skills that account for safety or effectiveness of intervention or data collection, and knowledge of purpose, physiological effects, and benefits. The components of safe and effective are discussed in lectures and lab presentations and demonstrations.

Safe: patient is not harmed by the intervention or the manner in which the intervention is conducted. This may include checking for contraindications or precautions, checking the patient's reaction to treatment, or using techniques of patient handling that maintain patient safety, such as locking a wheelchair or guarding a patient appropriately.

Effective: treatment addresses the patient's problem(s) within the plan of care and the student is able to accurately explain how the treatment accomplishes this or, if data collection, the data collection skill results in data that is reliable.

Performance Failure: If a student scores below $75 \%$ with the skill criteria, he/she must repeat a similar lab exam in order to show competency with the techniques. After the student shows competency with the techniques, the original exam grade is retained on the student's record and is used to compute the exam average. The student will have one (1) opportunity to show competency, and the repeated exam will be recorded on videotape or DVD. If unable to show competency, the student will receive a grade of zero (0) for the failed exam.

Critical Skill Failure: If a student does not meet the critical skill criteria on a lab exam, he/she must repeat the exam to show competency with the critical skill. After successfully repeating the exam, a grade of $70 \%$ will be recorded in the student's record. The student has one (1) opportunity to successfully repeat the exam, and the repeated exam will be recorded. If unsuccessful, the student will receive a grade of zero (0) for the exam.

The student will be given an opportunity to remediate a failed lab exam or a critical skill failure. It is the student's responsibility to schedule remediation with a PTA Instructor. Remediation can include any or all of the following: reviewing the failed exam; reviewing class handouts, lecture notes and books; completing extra assignments as given by the instructor; and attending tutorials. A time for taking the repeat exam will be determined by the instructor.

If a student fails both the lab skill and critical skill portions of the lab exam, he/she must repeat a lab exam over the same material from that section but not necessarily the same scenario and score a minimum of $\mathbf{7 5 \%}$. The grade recorded after successful re-take, will be the lower of the two original scores, whether that is lab skills or critical skill.

The Final Lab Exam is comprehensive and will include skills from Physical Agents and Basic Patient Care Skills. The performance portion of the exam will be conducted as if the treatments are being performed on a patient in a physical therapy department. The test will have a time limit and skills must be completed in the allotted time frame. Points will be deducted for all skills not completed and the final lab test grade will be calculated.

A $75 \%$ average of all section lab tests must be attained in order for the student to successfully complete the course. All of the lab exams and the final lab exam will be calculated together and weighted according to the terms in the syllabus. The student's cumulative grade for all lab exams will determine passing the course. A student whose lab exam cumulative grade falls below a $75 \%$ will receive a failing grade for the course.

If a student is absent from a lab session, the student will be required to take an additional lab exam as well as the regularly scheduled lab exam over the material covered in the lab missed. All the above mentioned requirements must be met for this second lab exam. The time the second lab exam will be taken will be at the discretion of the instructor based on time limitations. The additional exam is a pass/fail grade and is not averaged with the regular lab exams except as noted below. If a student fails the additional lab exam one opportunity to show competency will be given. If the student is unable to show competency, a grade of $0 \%$ will be averaged in with the regular lab exams.

Should the student know in advance that he/she will be absent on the day of a lab exam, arrangements can be made to take the exam prior to the scheduled date for the exam. A student who is absent on the day of the lab exam must notify the Lead Instructor prior to the lab test. A student who does not notify the instructor prior to the lab exam will receive a grade of zero $(0 \%)$ for that exam.. A student who arrives late for a lab exam will sacrifice that portion of the scheduled total time allotted. The missed time will be forfeited and the exam must be completed in the remainder time. Grade is based on the completed portion of the test.

## B. THEORY EXAMS

Written theory exams are given after each section of the course to check the student's progress in learning. Should the student know in advance that he/she will be absent the day of a theory exam, arrangements can be made to take the exam prior to the scheduled date of the exam. A student who is absent on the day of the theory exam must notify the Lead Instructor prior to the scheduled theory exam. A student which does not notify the instructor prior to the theory exam will receive a grade of zero ( $0 \%$ ). The student must attain a $75 \%$ cumulative average on all theory exams, including the final, in order to pass the course and weighted as per syllabus.

Theory exams are given using a computerized system call ParTest. The exam is a paper-pencil test consisting of true/false, multiple choice, or matching questions. A Scantron will be used. All answers must be correctly transferred onto the Scantron. Only the Scantron will be graded. Any answer that is not complete on the Scantron by the end of the test time will be considered incorrect and calculated to the exam test score. The amount of time allowed for each exam will be determined by the instructor and announced at the beginning of the exam.

## C. PROFESSIONAL PERFORMANCE CRITERIA/GENERIC ABILITIES

Since professional behavior is essential to a successful PTA, each student must comply with the criteria listed on the Professional Performance form with Generic Abilities. Students must have a score of $75 \%$ or better for the Professional Performance criteria or the grade will be $0 \%$. At $75 \%$ or above, a grade will be awarded according to the student's performance. Grading for this category will be based on the following:

Mid Term:
$1 \%$ for accurate completion and comments of self assessment in the
"Mid Term Student" performance on all indicators
2 points will be deducted for each Need Improvement (NI)
Points will be deducted for incomplete required comments
$1 \%$ for scheduling a midterm meeting with the assigned Clinical Instructor
\& participation in the discussion at the scheduled meeting
Final:
$2 \%$ for accurate completion and comments of self assessment in the
"Final Student" performance on all indicators
10 points will be deducted for each Need Improvement (NI)
Points will be deducted for incomplete required comments

## D. EXAMINATION TARDINESS

There will be strict adherence to the examination and quiz time. A student who arrives late will sacrifice that portion of the total time allotted. Exams and quizzes will be handed in/collected at the scheduled times.

## E. HOMEWORK ASSIGNMENTS

Homework will be assigned throughout the semester. Grading will be based on prompt completion as well as the quality of the work. Assignments are to be done individually unless otherwise specified.

Homework assignments that will be used as classroom review are assigned by the instructor and must be turned in at the beginning of the class. Homework assignments are only accepted prior to classroom review. Any homework not turned in will not be accepted and will receive a grade of zero (0). Homework that is not reviewed in class will be accepted and considered to be late. A 5 point penalty per day late is applied.

Students are expected to be punctual. Good "working" habits would mean arriving 10-15 minutes ahead of the scheduled start time of the class, staying for the complete session and returning from breaks promptly. Students should be dressed in lab clothes prior to the start of the lab session.

Students must sign in with their full name and time arrived on the daily role posted in the lab in order to receive credit for attendance. Students will be marked tardy by the instructor if not signed in at the official start of class. Signing in is part of the Grading \& Course Requirements and is graded on Professional Performance criteria.

Students are responsible for material covered during their absence from class.
This course is designed as preparation for entering the professional workforce. A student MUST call the Instructor if he/she being late or absent. This is considered responsible and committed work practice and is reflected on the Professional Performance form.

Prior approval must be given by the instructor if a student needs to attend a lab section other than the one to which he/she is assigned.

## F. EXAM ABSENCE

The student must notify the Lead Instructor prior to the examination time if absent for the theory or lab test. Absence from a theory or lab exam results in a ten (10) point deduction from the earned grade. All absences will be treated equally, regardless of the reason. The missed examination will be taken the day the student returns to school. It is the responsibility of the student to seek out the lead instructor and inform the instructor that he/she is present. The student should be ready to take the test that day. If the student fails to notify the lead instructor of his/her return to school, an additional five (5) point penalty will be applied for each day of the week that the student returned to school and has not taken the missed exam.

## 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 relationship between SCANS competencies and the objectives of PTHA 1431 are shown on the grid following the sections of the syllabus. The following SCANS skills will be emphasized.

> -Selects and Applies Technology to a Task
> -Maintain/Troubleshoots Equipment

## 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 WITH DISABILITIES

The Houston Community College System does not discriminate on the basis of disability in the recruitment and admission of students or the operation of any of its programs and activities. The designated office of compliance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitations Act or 1973 is the HCCS Office Access and Equity Office. Additional information regarding the process for obtaining accommodations for students with physical and mental disabilities may be obtained by contacting the Disability Support Services Counselor at individual campuses. The college will make its campuses and programs when viewed in their entirety, accessible to individuals with disabilities. Where it is impractical to modify a specific area to make it accessible, the college will provide an accessible alternative.

For instruction accommodations the student should contact the HCCS Disability Support Services through the counseling office at least one month prior to the first day of class. Academic accommodations will be provided only after students have properly registered for services through designated disability services staff. Any student who anticipates difficulty in gaining access to a classroom should contact the center administrator at or before the time of registration.

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

