



**COLEMAN COLLEGE FOR HEALTH SCIENCES
PHYSICAL THERAPIST ASSISTANT PROGRAM**

Spring 2017

PTHA 1431: PHYSICAL AGENTS

CRN #: 18462, 18463, 18464, 18466

Lecture:	Mondays 2 - 4pm;	Fri 9-11am	Room 473
Lab 1:	Tues/Thurs 8-10am;	Wed 7:30-11:30am	Room 452A
Lab 2:	Tues/Thurs 10am-12pm;	Wed 12-4pm	Room 452A

4 credit hours: 4 hours lecture and 8 hours lab/8 weeks (96 contact hours)

INSTRUCTORS

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COURSE DESCRIPTION

In this course, you will learn the 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.

CREDIT

4 semester hours

PREREQUISITES

PTHA 1413, PTHA 1229, PTHA 1301, PTHA 1305

REQUIRED TEXTBOOKS

1. Physical Agents, Theory and Practice, Third (3rd) Edition; ISBN: 978-0-8036-3816-7; Barbara Behrens, PTA, MS and Susan Michlovitz, PT, PhD, MS, CHT; ***Abbreviated as "PA" for reading assignments
2. Class Handouts

REFERENCE TEXTBOOKS:

1. Manual for Physical Agents, Sixth (6th) Edition; ISBN: 978-0-13-607215-7; Karen W. Hayes, PT, PhD, FAPTA and Kathy D. Hall, PT, EdD
2. Thermal Agents in Rehabilitation, Third (3rd) Edition; ISBN: 0-8036-0044-5; Susan L. Michlovitz, MS, PT, CHT
3. Physical Agents in Rehabilitation, From Research to Practice, Third (3rd) Edition; ISBN: 978-1-4160-3257-1; Michelle H. Cameron, MD, PT, OCS
4. The Manual of Trigger Point and Myofascial Therapy; ISBN: 1-55642-542-2; Dimitrios Kostopoulos, PT, PhD and Konstantine Rizopoulos, PT, FABS

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, 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** Relate the use of various biophysical agents to contemporary physical therapy practice.
- 2.0** Within the plan of care established by a supervising PT, administer treatment with biophysical agents.
- 3.0** Monitor and communicate normal and abnormal treatment response to biophysical agents.

Enabling Objectives

- 1.0 Relate the use of various biophysical agents to contemporary physical therapy practice.**
 - 1.1 Use basic statistical concepts and evidence based healthcare literature to support the application of biophysical agents to patients with different diagnoses.
 - 1.1.1 Complete a one page summary of a research article examining application of a biophysical agent to human research subjects within the last 3 years.
 - 1.2 Explain the physiological effect(s) (cardiovascular, metabolic, integumentary, lymphatic, musculoskeletal, and/or nervous system) to both medical professionals (medical terms) and patient/caregivers (laymen terms) of biophysical agents.
 - 1.2.1 Therapeutic massage (effleurage, petrissage, tapotement, transverse friction, trigger point release, myofascial release)
 - 1.2.2 Biofeedback (muscle stimulation and relaxation)
 - 1.2.3 Electrotherapeutic agents (TENS, NMES, IFC, iontophoresis, etc.)
 - 1.2.4 Compression therapies (elastic and mechanical)
 - 1.2.5 Cryotherapy (ice massage, cold pack, ice bath, cryocuff)
 - 1.2.6 Hydrotherapy (whirlpools, aquatic therapy)
 - 1.2.7 Superficial thermal agents (hot pack, fluidotherapy, paraffin, contrast bath)
 - 1.2.8 Deep thermal agents (ultrasound, diathermy)
 - 1.2.9 Traction (cervical and pelvic mechanical traction)
 - 1.2.10 Light therapies (ultraviolet and laser)
 - 1.2.11 Tilt table
 - 1.3 Link short and/or long-term treatment goals in the patient plan of care established by the physical therapist to the physiological effects of biophysical agents prior to administering treatment.
- 2.0 Within the plan of care established by a supervising PT, administer treatment with biophysical agents.**
 - 2.1 Recognize indications, contraindications and precautions for biophysical agents.
 - 2.1.1 Therapeutic massage (effleurage, petrissage, tapotement, transverse friction, trigger point release, myofascial release)
 - 2.1.2 Biofeedback (muscle stimulation and relaxation)
 - 2.1.3 Electrotherapeutic agents (TENS, NMES, IFC, iontophoresis, etc.)
 - 2.1.4 Compression therapies (elastic and mechanical)
 - 2.1.5 Cryotherapy (ice massage, cold pack, ice bath, cryocuff)
 - 2.1.6 Hydrotherapy (whirlpools, aquatic therapy)
 - 2.1.7 Superficial thermal agents (hot pack, fluidotherapy, paraffin, contrast bath)
 - 2.1.8 Deep thermal agents (ultrasound, diathermy)
 - 2.1.9 Traction (cervical and pelvic mechanical traction)
 - 2.1.10 Light therapies (ultraviolet and laser)
 - 2.1.11 Tilt table
 - 2.2 Using information collected from patient chart review, patient/caregiver interviews, and knowledge of biophysical agent use, decide if a change in patient status would prevent application of a biophysical agent within the plan of care (including home use) and report to the supervising physical therapist.

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, 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)

2.0 Within the plan of care established by a supervising PT, administer treatment with biophysical agents. (continued)

- 2.3 Safely and effectively apply biophysical agents to mock patients/clients including:
 - 2.3.1 Therapeutic massage (effleurage, petrissage, tapotement, transverse friction, trigger point release, myofascial release)
 - 2.3.2 Biofeedback (muscle stimulation and relaxation)
 - 2.3.3 Electrotherapeutic agents (TENS, NMES, IFC, iontophoresis, etc.)
 - 2.3.4 Compression therapies (elastic and mechanical)
 - 2.3.5 Cryotherapy (ice massage, cold pack, ice bath, cryocuff)
 - 2.3.6 Hydrotherapy (whirlpools, aquatic therapy)
 - 2.3.7 Superficial thermal agents (hot pack, fluidotherapy, paraffin, contrast bath)
 - 2.3.8 Deep thermal agents (ultrasound, diathermy)
 - 2.3.9 Traction (cervical and pelvic mechanical traction)
 - 2.3.10 Light therapies (ultraviolet and laser)
 - 2.3.11 Tilt table while monitoring vital signs for symptoms of orthostatic hypotension

3.0 Monitor and communicate normal and abnormal treatment response to biophysical agents.

- 3.1 Perform skin check to treatment area before, during, and after application of a biophysical agent or therapeutic massage to monitor normal or abnormal integumentary changes.
- 3.2 Determine patient pain level before and after the application of biophysical agents using standardized questionnaires, visual analog scales, and/or Likert scales to assess treatment efficacy.
- 3.3 Using modality specific sensation testing (sharp/dull, hot/cold, light touch, etc.) to the treatment area, determine absent/altered patient sensation before treatment, identify abnormal changes to sensation during/after treatment, and report to the supervising physical therapist.
- 3.4 Measure limb or joint girth before and after compression therapy using appropriate anatomical landmarks to allow for accurate measurement reproduction.
 - 3.4.1 Translate pre- and post-compression therapy girth measurements into treatment efficacy.
- 3.5 Recognize when adverse effects of biophysical agents require modification versus termination of treatment and report this to the supervising physical therapist.
- 3.6 Respond appropriately to any emergency situations (severe allergies, fire, burns, etc.) created by the application of biophysical agents.
- 3.7 Write a SOAP note that includes biophysical agent treatment parameters necessary for reimbursement, relates treatment to patient impairments and activity limitations (ICF language), and that complies with professional and practice setting specific guidelines.

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 per day, 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. 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:

<u>Theory Portion (39%)</u>	
Theory Exams (3 x 8%)	24%
Theory Final	15%
<u>Lab Portion (61%)</u>	
Lab Exams (4 x 8%)	32%
Lab Final	15%
Lab Assignments (4 x 3%)	12%
<u>Outcomes</u>	<u>2%</u>
	100%

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) on record for the lab portion**

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

Theory Exams

Theory exams are based on assigned readings, lectures, class discussions, films, videos, field trips, and 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, or short answer 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. 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.

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

Students will have up to three opportunities to pass each lab exam. Lab exams may be short skill-specific performance testing or scenario based practical exams and may be recorded (DVD or other format). Each student is responsible for bringing their own SmartCard/SanDisk and case which will become property of the program. Only skills recorded on the individual student's SmartCard/SanDisk will be graded. A resulting grade of $\geq 75\%$ as determined by the grade sheet criteria is required to pass the lab exam and indicates competence with the test skill/scenario. This is the ORIGINAL lab exam.

TESTING, GRADING & COURSE REQUIREMENTS (continued)

If the resulting grade is <75% as determined by the grade sheet criteria, the student has failed the ORIGINAL lab exam and has not proved competent with the test skill/scenario. The student must then remediate and complete a FIRST RETEST. The student will receive an email from the instructor outlining specific remediation requirements. All retests will be scheduled by the instructor during normal program hours. The student is expected to be available at the given test time.

On the FIRST RETEST, the student must retest the same failed skill/scenario from the ORIGINAL lab exam. If the student earns <75% on the FIRST RETEST of the same failed skill/scenario, they will receive a grade of "0" for the ORIGINAL lab exam indicating failure to show competence with the skill/scenario and will fail the lab portion of the course. They must email the Program Director within 48 hours of receiving their final grade to discuss the possibility and/or requirements for remaining in the program.

If the student earns ≥75% on the retest of the same failed skill/scenario from the ORIGINAL lab exam, they must then test the same material using a new similar skill/scenario. This will be a second lab exam on the same day. If they earn ≥75% on the same AND new similar skill/scenario on the FIRST RETEST, they receive a grade of 75% for the ORIGINAL lab exam indicating a passing score and competence with the material. If the student earns <75% on the new skill/scenario, the "0" will remain in the gradebook for the ORIGINAL lab exam until they remediate and retest one more time. This will be the SECOND RETEST.

On the SECOND RETEST, the student must retest the same failed skill/scenario from the FIRST RETEST. If the student earns <75% on the SECOND RETEST of the same failed skill/scenario from the FIRST RETEST, they will receive a grade of "0" for the ORIGINAL lab exam indicating failure to show competence with the skill/scenario and will fail the lab portion of the course. They must email the Program Director within 48 hours of receiving their final grade to discuss the possibility and/or requirements for remaining in the program.

If the student earns ≥75% on the retest of the same failed skill/scenario from the FIRST RETEST, they must then test the same material using a new similar skill/scenario. This will be a second lab exam on the same day. If they earn ≥75% on the same AND new similar skill/scenario on the SECOND RETEST, they receive a grade of 75% for the ORIGINAL lab exam grade indicating a passing score and competence with the material.

However, if the student earns <75% on the SECOND RETEST for either the same failed skill/scenario OR the new similar skill/scenario, they will receive a final grade of "0" for the ORIGINAL lab exam indicating failure to show competence with the skill/scenario and will fail the lab portion of the course. They must email the Program Director within 48 hours of receiving their final grade to discuss the possibility and/or requirements for remaining in the program.

PTA Program

Lab Exam Decision Tree



**** Course requirement – Student must earn $\geq 75\%$ in both theory and lab portions of the course and demonstrate competency (no remaining “zeros”) in all required course skills to earn a passing grade in the course.****

TESTING, GRADING & COURSE REQUIREMENTS (continued)

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 time. Any student who does not stop at the scheduled time will receive a grade of "0".

PLAN OF INSTRUCTIONAL PRACTICES

Teaching Methods

The material in this course will be taught by a combination of lecture, discussions, demonstrations, and hands-on practice. 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 throughout the course. At times, students will work 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. During exams, the lab will be set up like an actual physical therapy department. 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. 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.

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 exams 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.

PLAN OF INSTRUCTIONAL PRACTICES (continued)

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 and functioning as part of a physical therapy department under the direction and supervision of a Physical Therapist.

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.

Professional Attire

Skills 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

Students should be prepared for every lab by being in lab clothes **PRIOR** to the start of 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. Videotaping or recording of any kind of demonstrations or equipment is not allowed unless permission is given by the Instructor.

Lab Exams

As the SPTA during lab exams, each student must dress as if going to work in a clinic or hospital. Professional attire and grooming will be required on lab exams. Requirements are as follows:

1. Short sleeve polo shirt and khaki pants OR matching scrub top and bottom
2. Flat shoes with closed toes, non-skid soles
3. Short fingernails
4. No dangling earrings or excessive piercings
5. Long hair pulled back
6. Facial hair trimmed and neat

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.

- 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

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 on the fifth floor to assist with any stresses, academic or personal, that may affect academic success. Students should seek out these services as needed.

SERVICES TO STUDENTS WITH DISABILITIES

Houston Community College is dedicated to providing an inclusive learning environment by removing barriers and opening access for qualified students with documented disabilities in compliance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act. Ability Services is the designated office responsible for approving and coordinating reasonable accommodations and services in order to assist students with disabilities in reaching their full academic potential. In order to receive reasonable accommodations or evacuation assistance in an emergency, the student must be registered with Ability Services.

If you have a documented disability (e.g. learning, hearing, vision, physical, mental health, or a chronic health condition) that may require accommodations, please contact the appropriate Ability Services Office (<http://www.hccs.edu/district/students/disability-services/ada-counselors/> or 713-718-7376 for Coleman). Please note that classroom accommodations cannot be provided prior to your Instructor's receipt of an accommodation letter and accommodations are not retroactive. Accommodations can be requested at any time during the semester. However, if an accommodation letter is provided to the Instructor after the first day of class, sufficient time (1 week) must be allotted for the Instructor to implement the accommodations.

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. Students who are pregnant and require accommodations should contact any of the ADA Counselors for assistance.

It is important that every student understands and conforms to respectful behavior while at HCC. Sexual misconduct is not condoned and will be addressed promptly. Know your rights and how to avoid these difficult situations.

Log in to www.edurisksolutions.org. Sign in using your HCC student email account, then go to the button at the top right that says "Login" and enter your student number.

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

Spring 2017

Weekly Topic/ Readings/Objectives	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Week 1 – 3/20 – 3/24 <u>Soft Tissue Management</u> Readings: PA Ch. 2-3, 9 Obj: 1.2.1, 1.3, 2.1.1, 2.2, 2.3.1, 3.3, 3.4, 3.6, 3.7	Syllabus Review & Soft Tissue Management Lecture	Palpation Activity; STM Basic Strokes Lab	STM-Spine STM-UE/LE Lab	Scar Tissue Massage (Transverse Friction, Myofascial Release) & Trigger Points Lab	STM Review
Week 2 – 3/27 – 3/31 <u>Soft Tissue Management</u> Readings: PA Ch. 9 Obj: 1.2.1, 1.2.6, 2.1.6, 1.3, 2.1.1, 2.2, 2.3.1, 3.3, 3.4, 3.6-3.8	STM Theory Test (PA Ch.2-3; Handouts Wks.1-2)	STM Lab Practical Practice	STM Lab Practical	Atrium STM	Hydrotherapy/ Buoyancy Lecture
Week 3 - 4/3 - 47 <u>Hydrotherapy/Thermal Agents</u> Readings: PA Ch. 4-6, 10 Obj: 1.2.5-1.2.8, 1.2.9, 1.3, 2.1.5- 2.1.8, 2.1.10, 2.2, 2.3.5-2.3.8, 2.3.10, 3.3, 3.4, 3.6, 3.7	Cryotherapy, Superficial & Deep Heat Lecture	HP/CP IM/Cryocuff/ Contrast Bath Lab	Whirlpool/ Fluidotherapy/ Paraffin Lab	Ultrasound (gel method), Ultrasound (water method), Diathermy, Light Therapy Lab	Thermal Review
Week 4 – 4/10 – 4/14 <u>STM/Thermal Testing</u> <u>Intro to Electrotherapy</u> Readings: PA Ch.11(not pp.273-84) Obj: 1.2.4, 1.2.5-1.2.8, 1.2.9, 1.3, 2.1.3, 2.1.5-2.1.8, 2.1.10, 2.2, 2.3.5- 2.3.8, 2.3.10, 3.3, 3.4, 3.6-3.8	Thermal Theory Test (PA Ch.4-6,10; Handouts Wk.2)	Thermal Lab Practical Practice	Thermal Lab & STM Practical	Intro to Electrotherapy Lab	HOLIDAY
Week 5 – 4/17 – 4/21 <u>Electrotherapy</u> Readings: 13-16, pp.273-284 Obj: 1.2.2-1.2.3, 1.3, 2.1.2-2.1.3, 2.2, 2.3.2-2.3.3, 3.3, 3.4, 3.6, 3.7	Electrotherapy/ TENS & NMES Lecture	IFC, Iontophoresis, Combo US/ES, Biofeedback Lecture	TENS & NMES, IFC Lab	Iontophoresis/ Biofeedback/ Combo US/ES Lab	Electrotherapy Review

Weekly Topic/ Readings/Objectives	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Week 6 – 4/24 – 4/28 <u>Electrotherapy Testing</u> <u>Tilt Table & Compression</u> Readings: PA Ch. 8 Obj: 1.2.2-1.2.4, 1.2.11, 1.3, 2.1.2-2.1.4, 2.2, 2.3.2-2.3.3, 3.3, 3.4, 3.6-3.8	Electrotherapy Theory Test (PA Ch. 11-16; Handouts Wks. 4-5)	Electrotherapy Lab Practical Practice	Electrotherapy Lab Practical	Transfer Review	Tilt Table/Compression Lecture
Week 7 – 5/1 – 5/5 <u>Mechanical Traction</u> Readings: PA Ch. 7 Obj: 1.2.9, 1.2.11, 1.3, 2.1.9, 2.1.11, 2.2, 2.3.9, 2.3.11, 3.3-3.8	Mechanical Traction Lecture Extra Credit Due	Tilt Table/Compression ICT/IPT Traction Lab	Tilt Table/Compression ICT/IPT Traction Lab	Tilt Table/ Compression/ Traction Practical Review	Tilt Table/ Compression/ Traction Lab Practical
Week 8 – 5/8 – 5/12 <u>Final Exams</u> Readings: All Obj: 1.0-3.0	COMPREHENSIVE THEORY FINAL Research Assignment Due	OPEN LAB 8 AM-12 PM	COMPREHENSIVE LAB FINAL		