Course Description
PTH 228 Manual Therapy Techniques
This course introduces principles and basic techniques of manual therapy.
Prerequisites: PTH 240, PTH 242, PTH 252.
Corequisites: PTH 115, PTH 235, PTH 246, PTH 253.
2 Credits (1.0 lecture, 3.0 lab)

Course Focus
This course introduces the theory and describes the techniques of joint mobilization for the extremities. Soft tissue mobilization and cardiopulmonary physical therapy techniques and are presented and practiced. Orthopedic management of the spine is presented and practiced within the context of the plan of care as developed by a licensed physical therapist. Concepts related to posture and postural awareness are presented.

Text and References


O’Sullivan, S. and Schmitz, T. Physical Rehabilitation, 6th Ed. FA Davis.

Starkey C. Therapeutic Modalities, 4th Ed. F.A. Davis.

Course Objectives
General:
1. Read a research article pertinent to manual therapy techniques.
2. Prepare and present a synopsis of a research article to classmates.
3. Utilize correct body mechanics when administering manual therapy techniques.
Unit 1: Joint Mobilization Techniques
1. Explain the general and applied concepts of peripheral joint mobilization.
2. Select correct positions for peripheral joint mobilization.
3. Define joint mobilization grades.
4. Describe the closed packed position for specific joints.
5. Identify joint mobilization indications /contraindications.*
6. Recognize peripheral joint capsular patterns.
7. Demonstrate effective joint mobilization techniques.
8. Recognize the role of the PTA in joint mobilization.

Unit 2: Spinal Traction
1. Explain the physical principles related to the use of spinal traction in physical therapy intervention.
2. Determine parameters for spinal traction based on the POC and signs and symptoms.
3. Identify indications and contraindications to the use of spinal traction.*
4. Identify advantages and disadvantages of different modes of traction.
5. Operate mechanical cervical and lumbar traction equipment effectively and safely.*
6. Perform manual cervical traction effectively and safely. *
7. Monitor patient responses during the use of mechanical and manual traction.
8. Document traction interventions using the SOAP format.

Unit 3: Posture
1. Describe normal postural alignment.
2. Observe abnormal postural alignment.
3. Recognize common abnormal postures.
4. Related pain and other signs/symptoms to abnormal postures.
5. Apply clinical guidelines related to correcting poor postures.
6. Recognize possible causes of postural misalignment.
7. Summarize ergonomic guidelines.

UNIT 4: Orthopedic Management of the Spine
1. Define terms related to physical therapy treatment of the spine.
2. Differentiate core and global spinal muscles.
3. Describe common spinal injuries/pathologies.
4. Explain concepts related to the rehabilitation methods of common spinal injuries and disorders.
5. Select appropriate head, neck and trunk exercises based on the POC and signs and symptoms.
6. Analyze patient related situations and modify exercises accordingly.
7. Explain the rationale for using neck/trunk corsets and braces.
8. Instruct patients in the care of and donning/doffing of trunk orthotics.
9. Apply clinical guidelines related to spinal stabilization exercises.
10. Explain the use of different core strengthening exercises.
11. Explain the use of spinal stretching exercises.
12. Identify indications and contraindications to core exercise techniques.

Unit 5: MMT and Goniometry
1. Perform manual muscle testing techniques for the neck, and trunk.
2. Perform goniometric measurement of spinal movements.
3. State the adult norms for spinal range of motion.
4. Recognize common adaptations to limited spinal ROM.

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UNIT 6: Soft Tissue Mobilization
1. Identify indications and contraindications for specific soft tissue massage techniques.*
2. Define terms related to soft tissue manual therapy (massage)
3. Explain the physiological and psychological responses to specific massage techniques.
4. Demonstrate soft tissue mobilization techniques.
5. Describe different massage strokes.
6. Select appropriate manual therapy techniques based on the POC, diagnosis, and signs/symptoms.
7. Sequence manual therapy techniques correctly based on the POC, diagnosis, and signs/symptoms.

UNIT 7: Chest Physical Therapy
1. Define lung volumes and capacities.
2. Explain the process of pulmonary ventilation.
3. Describe the impact of aging on respiratory system.
4. Defines terms related to chest physical therapy.
5. Describe different breath sounds.
6. Relate adventitious breath sounds to diagnoses.
7. Identify indications and contraindications for chest physical therapy techniques.*
8. Explain the physiological responses to chest physical therapy techniques.
9. Explain the theory of chest physical therapy techniques including postural drainage, percussion, and vibration.
10. Describe different types of breathing exercises.
11. Instruct classmates in different types of breathing exercises.
12. Describe techniques used to assess thoracic expansion during pulmonary ventilation.

UNIT 8: Lymph Edema Management
1. Explain the physiological principles of lymphedema.
2. Recognize risk factors for lymphedema.
3. Describe the stages of lymphedema.
4. Differentiate primary from secondary lymphedema.
5. Explain the techniques used in manual lymphatic drainage.
6. Differentiate commonly used modes of mechanical compression.
7. Describe methods used to measure a patient for compressive garments.
8. Describe the procedure used in bandaging for lymphedema management.
9. State the rationale for the different layers of compressive bandaging used in lymphedema management.
10. Relate the degree of compression indicated in manufactured compression garments to different diagnoses.
11. Identify contraindications and precautions to the use of compression therapies.*

Student Contributions
Laboratory Requirements
Each student is required to actively participate in laboratory sessions by practicing the application of various skills on fellow classmates. Appropriate and professional behavior is expected at all times in the laboratory setting. Shorts and a T-shirt are the required attire for all laboratory activities. A sweatshirt or sweatpants may be worn over these if such clothing does not interfere with the laboratory activities. Clothing must allow access to various parts of the body during specified laboratory activities.

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Classes are designed to employ a variety of teaching techniques. In order to maximize learning, required readings and Web enhanced sections should be done prior to class. If a student is falling behind in clinical performance and/or academic achievement, it is imperative to seek immediate assistance from the instructor.

**Course Evaluation**

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**GRADING POLICY**

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<td>82% - 89% B</td>
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**Grading Methodology.** The final grade must be 75.00% or more in order to pass the course and progress in the program. In addition, each student must pass the final exam with a grade of 75.00% or above. If a student fails the final exam a second attempt will be given. The highest score a student can achieve on the second attempt is 75% and the final grade will be a C. Students absent from an examination or presentation will receive a “0” grade for the examination unless other arrangements are made with the individual instructor prior to the examination or presentation day or on the examination or presentation day before the test/presentation is scheduled to be given. It is the responsibility of the student to contact the appropriate instructor to arrange to make up the examination. Arrangements may be completed by telephone. If the instructor is not available, a message should be left on the instructor’s voice mail AND with another member of the faculty or administrative assistant. The instructor will decide the time and method of make-up examinations on an individual basis. Messages sent by other students are unacceptable. The student is responsible for notifying the instructor of the reason for the absence. Grades are Each student must demonstrate safety and competence in required laboratory skills. Students are responsible for insuring that laboratory skills are checked off by the instructor. The Laboratory Skills Achievement List for this course can be found at the back of this syllabus. All laboratory skills must be passed with a minimum score of 75% in order to pass the course. Students will be given three opportunities to pass the each skill check. In addition, the student must pass the practical exam (score 75% or greater) in order to pass the course. Should the student fail the practical exam, they will be given one opportunity to retake the exam. The highest possible score on retaking the exam is 75.00%. Non-compliance with a critical safety criterion will result in an automatic failure on skills checks as well as practical exams.

**ADA STATEMENT**

The Technical College of the Lowcountry provides access, equal opportunity and reasonable accommodation in its services, programs, activities, education and employment for individuals with

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disabilities. To request disability accommodation, contact the counselor for students with disabilities at (843) 525-8228 during the first ten business days of the academic term.

ATTENDANCE

1. The College’s statement of policy indicates that students must attend ninety percent of total class hours or they will be in violation of the attendance policy.

2. Students not physically attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.

3. Students taking an online/internet class must sign in and communicate with the instructor within the first ten calendar days from the start of the semester to indicate attendance in the class. Students not attending class during the first ten calendar days from the start of the semester must be dropped from the class for NOT ATTENDING.

4. Reinstatement requires the signature of the division dean.
   a. In the event it becomes necessary for a student to withdraw from the course OR if a student stops attending class, it is the student’s responsibility to initiate and complete the necessary paperwork. Withdrawing from class may have consequences associated with financial aid and time to completion.
   b. When a student exceeds the allowed absences, the student is in violation of the attendance policy. The instructor MUST withdrawal the student with a grade of “W”, “WP”, or “WF” depending on the date the student exceeded the allowed absences and the student’s progress up to the last date of attendance or
   c. under extenuating circumstances and at the discretion of the faculty member teaching the class, allow the student to continue in the class and make-up the work. This exception must be documented at the time the allowed absences are exceeded.
   d. Absences are counted from the first day of class. There are no "excused" absences. All absences are counted, regardless of the reason for the absence.

5. A student must take the final exam or be excused from the final exam in order to earn a non-withdrawal grade.

6. Students are expected to be in class on time. Arrival to class after the scheduled start time or leaving class prior to dismissal counts as a tardy. Three tardies and/or early departures are considered as one absence unless stated otherwise. Students are expected to be in class on time. If a student is going to be absent or tardy they are expected to notify the class instructor by telephone or email prior to start time. Failure to do so is considered a no call/no show and will result in a learning contract.

7. It is the student’s responsibility to sign the roll/verify attendance with instructor upon entering the classroom. Failure to sign the roll/verify attendance results in a recorded absence. In the event of tardiness, it is the student’s responsibility to insure that attendance is marked. The student is responsible for all material/announcements presented, whether present or absent.

8. Continuity of classroom and laboratory (which includes clinical experiences) is essential to the student’s progress in providing safe and competent patient care. Students are expected to use appropriate judgment for participating in clinical activities. To evaluate the student’s knowledge and skills, it is necessary for the student to be present for all clinical experiences. If absence does occur, the designated clinical site, in addition to the Division of Health Sciences Administrative Assistant, must be notified by telephone no later than 30 minutes prior to the start of the clinical experience. The Division of Health Sciences telephone number is 843-525-8267.

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A copy of TCL’s STATEMENT OF POLICY NUMBER: 3-1-307 CLASS ATTENDANCE (WITHDRAWAL) is on file in the Division Office and in the Learning Resources Center.

HAZARDOUS WEATHER
In case weather conditions are so severe that operation of the College may clearly pose a hardship on students and staff traveling to the College, notification of closing will be made through the following radio and television stations: WYKZ 98.7, WGCO 98.3, WGZO 103.1, WFXH 106.1, WWVV 106.9, WLOW 107.9, WGZR 104.9, WFXH 1130 AM, WLHV 101.1, WSOK 1230 AM, WAEV 97.3, WTOC TV, WTGS TV, WJWJ TV, and WSAV TV. Students, faculty and staff are highly encouraged to opt in to the Emergency Text Message Alert System. www.tcl.edu/textalert.asp

ACADEMIC MISCONDUCT
There is no tolerance at TCL for academic dishonesty and misconduct. The College expects all students to conduct themselves with dignity and to maintain high standards of responsible citizenship. It is the student’s responsibility to address any questions regarding what might constitute academic misconduct to the course instructor for further clarification.

The College adheres to the Student Code for the South Carolina Technical College System. Copies of the Student Code and Grievance Procedure are provided in the TCL Student Handbook, the Division Office, and the Learning Resources Center. Health care professionals hold the public trust. Academic misconduct by health science students calls that trust into question and academic integrity is expected. It is a fundamental requirement that any work presented by students will be their own. Examples of academic misconduct include (but are not limited to):

1. copying the work of another student or allowing another student to copy working papers, printed output, electronic files, quizzes, tests, or assignments.
2. completing the work of another student or allowing another student to complete or contribute to working papers, printed output, electronic files, quizzes, tests, or assignments.
3. viewing another student’s computer screen during a quiz or examination.
4. talking or communicating with another student during a test.
5. violating procedures prescribed by the instructor to protect the integrity of a quiz, test, or assignment.
6. plagiarism in any form, including, but not limited to: copying/pasting from a website, textbook, previously submitted student work, or any instructor-prepared class material; obvious violation of any copyright-protected materials.
7. knowingly aiding a person involved in academic misconduct.
8. providing false information to staff and/or faculty.
9. entering an office unaccompanied by faculty or staff.
10. misuse of electronic devices.
Skills Check List

Joint Mobilization
   Hip, Knee, Ankle, Subtalar, Shoulder, Elbow, Wrist

Traction
   Lumbar (mechanical)
   Cervical (mechanical)

Soft Tissue Mobilization
   Effleurage
      Superficial
      Deep
      Shingling
   Petrisagge
      Kneading
      Flat hand
      Double hand
      Finger/Thumb pad
   Picking up
   Wringing

Friction
   Transverse
   Circular

Tapotement
   Slapping
   Cupping
   Hacking
   Pounding
   Beating
   Raindrop
   Pincement

Vibration
   Fine
   Coarse (Shaking)

Neuromuscular Techniques
   Compression
   Stripping

Spine and Posture Assessment
   Goniometry, MMT, alignment

Course Coordinator: Vicki Daniel, DPT, Program Director
OFFICE LOCATION: Building 4 Room 113
PHONE NUMBER: 843-525-8230
Email: vdaniel@tcl.edu

Reviewed/Revised/VDaniel 8-13-15/Approved: GMLevicki, August 2015