COURSE OUTLINE

Course Number: PTA 210
Course Title: PTA Techniques
Credits: 4

Hours: lecture/Lab/Other: 3/2/0
Pre-requisite: PTA 105, PTA 107
Co-requisite: PTA 211
Implementation: Fall

Catalog description:
Addresses patient care and handling, including patient positioning and bed mobility, vital signs, transfers and gait, aseptic techniques, wound care, pharmacology, edema management, wheelchair use, body mechanics, and cardiac and pulmonary interventions. Students develop their skills through practice with each other. Competencies evaluated throughout the course.

Required texts/other materials:
3. Kinesiology text previously used in PTA 105:
   OR
4. Text Required for PTA 211 Physical Agents:

Revision date: Fall 2020
Course coordinator: Holly Kaiser, 609-570-3478, Kaiserh@mccc.edu

Information resources:
This course makes use of the required texts for the course and in addition, uses the resources of the Web.

Course Competencies/Goals:
Following the successful completion of this course with a grade of C+ or higher, the learner will be able to:

MCCC Course Outline; Approved by the Curriculum Committee 12/6/07
1. Explain and demonstrate the importance of the utilization of safe body mechanics for transporting, transferring, and/or lifting patients.
2. Describe the characteristics of a patient’s vital signs at rest and in response to exercise, and appropriately measure and document vital signs.
3. Describe the components of normal gait, and typical abnormalities of gait dysfunction.
4. Measure an ambulatory assistive device for a classmate and instruct the classmate in the appropriate use of that device.
5. Discuss and demonstrate the therapeutic benefits of soft tissue massage within the physical therapy plan of care.
6. Describe the benefits of mechanical compression, aseptic techniques, wound care, and/or pulmonary techniques for specific patient diagnoses within a physical therapy plan of care.

**Course-specific General Education Knowledge Goals and Core Skills.**

**General Education Knowledge Goals**

**Goal 1. Communication.** Students will communicate effectively in both speech and writing.

**Goal 2. Mathematics.** Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.

**Goal 3. Science.** Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.

**Goal 4. Technology.** Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

**Goal 8. Diversity.** Students will understand the importance of a global perspective and culturally diverse peoples.

**Goal 9. Ethical Reasoning and Action.** Students will understand ethical issues and situations.

**MCCC Core Skills**

**Goal A. Written and Oral Communication in English.** Students will communicate effectively in speech and writing, and demonstrate proficiency in reading.

**Goal B. Critical Thinking and Problem-solving.** Students will use critical thinking and problem solving skills in analyzing information.

**Goal C. Ethical Decision-Making.** Students will recognize, analyze and assess ethical issues and situations.

**Goal D. Information Literacy.** Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.

**Goal E. Computer Literacy.** Students will use computers to access, analyze or present information, solve problems, and communicate with others.

**Goal F. Collaboration and Cooperation.** Students will develop the interpersonal skills required for effective performance in group situations.

**Goal G. Intra-Cultural and Inter-Cultural Responsibility.** Students will demonstrate an awareness of the responsibilities of intelligent citizenship in a diverse and pluralistic society, and will demonstrate cultural, global, and environmental awareness.

**Units of study in detail:**

<table>
<thead>
<tr>
<th>Units of study in detail:</th>
<th>MCCC Goals &amp; Skills:</th>
<th>Course Learning Objectives:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit 1</strong> Aseptic Technique &amp; Vital Signs</td>
<td>1,2,3,4,8,9 A, B, C, D, E, F,G</td>
<td>C1.1, C1.6, C1.13, C2.1-2.3, C3.7, P1.1-1.2, P1.9-1.10, P2.1-2.2, P2.9, P4.14, P3.4, P4.1-4.2, P4.7, P4.12-4.13, P4.16-4.17, A1.1-1.9</td>
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</table>
| Unit 2  | Wheelchair Components and Fit  
| Patient Positioning and Draping  
| Body Mechanics  | \( F,G \)  | 1,2,3,4,8,9  
|  | A, B, C, D, E,  
|  | F,G  | C1.5, C1.7-1.8, C1.32, C2.10,  
|  | C3.1, C3.3-3.4, C3.7, C4.4,  
|  | C5.1, C6.3, P1.3, P1.7, P1.9,  
|  | P1.11-1.13, P2.7, P2.9, P2.11- 
|  | 2.13, P3.2-3.3, P4.10-4.11,  
|  | P4.15, P3.4, P4.1-4.2, P4.7,  
|  | P4.12-4.13, P4.16-4.17, A1.1-1.9  |
| Unit 3  | Normal Gait and Abnormal Gait  | \( F,G \)  | 1,2,3,4,8,9  
|  | A, B, C, D, E,  
|  | F,G  | C1.17, C1.31, C2.4-2.5, C3.7,  
|  | C3.10, C4.1, P1.9, P2.9-2.10,  
|  | P3.1, P3.4, P4.1-4.2, P4.7, P4.12- 
|  | 4.13, P4.16-4.17, A1.1-1.9  |
| Unit 4  | Gait with Assistive Devices  | \( F,G \)  | 1,2,3,4,8,9  
|  | A, B, C, D, E,  
|  | F,G  | C1.17, C1.25, C1.28, C1.30,  
|  | C2.12-2.13, C3.2, C3.6-3.7,  
|  | C3.9, C6.1-6.2, P1.4, P1.6,  
|  | P1.8-1.9, P2.4, P2.6, P2.8- 
|  | 2.9, P4.3-4.6, P3.4, P4.1-4.2,  
|  | P4.7, P4.12-4.13, P4.16-4.17, A1.1-1.9  |
| Unit 5  | Bed Mobility, Transfers & Zero Lifting  | \( F,G \)  | 1,2,3,4,8,9  
|  | A, B, C, D, E,  
|  | F,G  | C1.14, C1.17, C2.9-2.10, C2.13,  
|  | C3.7-3.8, P1.4-1.5, P1.9, P2.3- 
|  | 2.5, P2.9, P4.5, P4.8, P3.4,  
|  | P4.1-4.2, P4.7, P4.12-4.13, 
|  | P4.16-4.17, A1.1-1.9  |
| Unit 6  | Wound Care and Burns Pharmacology  | \( F,G \)  | 1,2,3,4,8,9  
|  | A, B, C, D, E,  
|  | F,G  | C1.2-1.4, C1.12, C2.6-2.8,  
|  | C3.7, P1.9, P2.9, P3.4, P4.1- 
|  | 4.2, P4.7, P4.12-4.13, P4.16- 
|  | 4.17, A1.1-1.9  |
| Unit 7  | Emergency Procedures  
| Radiography  
| Medical Labs & Equipment  | A, B, C, D, E,  
| F, G  | C1.15, C1.26, C1.29, C2.11, C3.7,  
| P1.9, P2.9, P3.4, P4.1-4.2, P4.7,  
| P4.12-4.13, P4.16-4.17, A1.1-1.9  |
| Unit 8  | Cardiac Pathology and Rehabilitation  | \( F,G \)  | 1,2,3,4,8,9  
|  | A, B, C, D, E,  
|  | F,G  | C1.10, C3.5, C3.7, P1.9, P2.9,  
|  | P3.4, P4.1-4.2, P4.7, P4.12- 
|  | 4.13, P4.16-4.17, A1.1-1.9  |
| Unit 9  | Pulmonary pathology and Chest PT  | \( F,G \)  | 1,2,3,4,8,9  
|  | A, B, C, D, E,  
|  | F,G  | C1.10-1.11, C1.16, C1.20,  
|  | C1.24, C1.27, C3.7, P1.9,  
|  | P2.9, P3.4, P4.1-4.2, P4.7,  
|  | P4.12-4.13, P4.16-4.17, A1.1-1.9  |
**Learning Objectives have been identified in each of the following domains of learning:**

**C1. Knows specific facts (Remember)**
- C1.1 Identify the most appropriate personal protective equipment to prevent the spread of infection due to various modes of infection transmission
- C1.2 Describe the sequence for tissue healing
- C1.3 Describe the differences between normal and abnormal tissue healing characteristics
- C1.4 Identify the components of tissue healing that need to be documented in a patient record
- C1.5 Describe the principles of body mechanics that would prevent injury to self and others
- C1.6 Identify proper methods of donning and doffing personal protective equipment
- C1.7 Define wheelchair components and management of those components
- C1.8 Describe proper instruction for self-propulsion of a wheelchair
- C1.9 Outline effective physical therapy treatment interventions for people with varying causes of edema
- C1.10 Outline effective physical therapy treatment interventions for people with cardiac and pulmonary dysfunction
- C1.11 Define lung volumes and capacities
- C1.12 Outline effective physical therapy treatment interventions to promote wound healing
- C1.13 Describe common pathogens found in healthcare settings and the associated mode of pathogen transmission
- C1.14 Identify the principles of “zero lifting”
- C1.15 Identify the uses for various diagnostic studies
- C1.16 Describe how to position a patient in supine, prone, side lying or sitting to improve postural drainage
- C1.17 Define the levels of assistance for patient activities and transfers
- C1.18 Identify the indications and contraindications for the use of intermittent compression
- C1.19 Describe how to prepare a patient for the application of intermittent compression
- C1.20 Describe the sequence for postural drainage for the lobes of the lungs
- C1.21 Describe the use of intermittent compression as a therapeutic intervention for edema
- C1.22 Identify possible effects of a burn on vital signs
- C1.23 Recognize activities that aggravate or relieve edema
- C1.24 Recognize activities that aggravate or relieve dyspnea
- C1.25 List the ambulatory assistive devices that can be utilized for a patient with restricted weight bearing status
- C1.26 Recognize an emergency situation in the physical therapy clinical environment and describe the most appropriate course of action to maximize patient safety
- C1.27 Describe chest wall movement during ventilation and factors that may limit it
- C1.28 Describe the correct method of ensuring that various assistive devices are the correct fit for a patient
- C1.29 Recall the indications, precautions, and contraindication of medical equipment found in an acute hospital setting
- C1.30 Define all weight bearing statuses
- C1.31 Describe common gait deviations and compensations based on various impairments
- C1.32 Identify the components of draping that ensure safety, respect and competence
C2. Comprehends basic concepts and principles (Understand)
   C2.1 Describe safe and correct measurement of all vital signs
   C2.2 Describe safe and correct interpretation of all vital signs
   C2.3 Differentiate between safe and unsafe patient handling techniques
   C2.4 Use anatomical and kinesiology knowledge to understand muscles contractions that allow for each phase of the gait cycle
   C2.5 Describe non-pathologic gait patterns and differentiate them from pathologic gait patterns
   C2.6 Recognize major groups of medications prescribed and how they may impact therapy
   C2.7 Utilize objective data to distinguish between various causes of wounds
   C2.8 Differentiate between the 4 stages of pressure injuries
   C2.9 Summarize the steps necessary to complete various patient transfer techniques in a safe and competent manner
   C2.10 Utilize the principles of body mechanics and patient data to explain safe and effective bed mobility techniques
   C2.11 Explain which lab values will cause therapists to adjust patient treatment interventions and how
   C2.12 Differentiate between gait patterns and explain when each would be utilized
   C2.13 Summarize safe and effective patient guarding on level and elevated surfaces

C3. Applies basic concepts and principles to new situations (Apply)
   C3.1 Relate anatomical knowledge to positioning while positioning a classmate in supine, prone, side lying and sitting to decrease weight bearing on bony landmarks
   C3.2 Predict the potential effects of improperly fitting assistive devices in small group discussions
   C3.3 Relate anatomical knowledge to positioning while positioning a classmate in supine, prone, side lying and sitting to prevent contracture development
   C3.4 Relate wheelchair fit to integumentary integrity
   C3.5 Relate sternal precautions to treatment decisions
   C3.6 Predict methods of adjusting assistive devices based on knowledge of previously learned assistive devices
   C3.7 Integrate knowledge from PTA 105, 107 & 112 into the new material in this PTA 210 course during lab scenarios, classroom case studies, competency tests, practical exams, quizzes and written exams
   C3.8 Use relevant patient data to choose the most appropriate transfer technique
   C3.9 Use multiple factors to determine the most appropriate assistive device for various patient scenarios
   C3.10 Using principles of kinesiology and physics, predict gait deviations based on weakness in small groups during lecture

C4. Demonstrates the ability to analyze procedures to determine if organizational principles are being followed (Analyze)
   C4.1 Analyze gait patterns demonstrated by the course instructor during lecture, identifying characteristics of each and comparing/contrasting all
   C4.2 Differentiate between the signs and symptoms of various causes of edema
   C4.3 Determine how various causes of edema will impact treatment interventions
   C4.4 Differentiate between purposes and risks of short term positioning and long term positioning in small groups during lecture

C5. Applies thinking skills when judging data and performance (Evaluate)
   C5.1 Evaluate the validity of statements made regarding wheelchair fit on written exams

C6. Uses knowledge to create new methods necessary to gather data (Create)
C6.1 Generate a retro-walking gait pattern to maintain a lower extremity weight bearing restriction during lab using the principles used for forward walking
C6.2 Devise a safe and appropriate method for curb negotiation using various assistive devices to maintain a lower extremity weight bearing restriction during lab
C6.3 Devise draping techniques for a variety of patient scenarios in small groups during lab, using the principles of draping

**Psychomotor**
The learner will be able to successfully:

P1. Observe patient care skills performed by the instructor (Observe)
   P1.1 Observe the instructor demonstrate correct hand hygiene techniques and donning/doffing of sterile and clean gloves during lecture and lab
   P1.2 Observe the instructor demonstrate the correct method of measuring all vital signs
   P1.3 Observe the instructor demonstrate the correct use of a draw sheet and bed mobility during lecture and lab
   P1.4 Observe the instructor demonstrate the correct use of a gait belt while properly guarding a subject during gait training on both level and elevated surfaces during lecture and lab
   P1.5 Observe the instructor demonstrate correct methods of various patient transfer techniques in lab
   P1.6 Observe the instructor demonstrate the correct methods for adjusting the height of various assistive devices during lecture and lab
   P1.7 Observe the instructor demonstrate the correct technique for propelling a subject in a wheelchair on both level and elevated surfaces in lab
   P1.8 Observe the instructor demonstrate effective verbal and visual instructions regarding weight bearing status and gait patterns using various assistive devices during lab
   P1.9 Observe and review examples of proper medical documentation
   P1.10 Observe the instructor properly don and doff sterile and clean gloves
   P1.11 Observe the instructor model safe body mechanics during lecture and lab
   P1.12 Observe the instructor determine appropriateness of wheelchair fit
   P1.13 Observe the instructor demonstrate effective verbal and visual instructions regarding wheelchair management and self-propulsion

P2. Copy patient care skills during lab activities, with feedback provided by the course instructor (Imitate)
   P2.1 Perform correct hand hygiene techniques and donning/doffing of sterile and clean gloves during lab with the guidance and feedback of the instructor
   P2.2 Perform correct method of measuring vital signs (including blood pressure, heart rate, respiratory rate, and pain) during lab with the guidance and feedback of the instructor
   P2.3 Use of a draw sheet both individually and in pairs prior to performing bed mobility during lab with the guidance and feedback of the instructor
   P2.4 Use a gait belt while properly guarding a subject during gait training on both level and elevated surfaces during lab with the guidance and feedback of the instructor
   P2.5 Perform safe and effective methods of various patient transfer techniques in lab with the guidance and feedback of the instructor
   P2.6 Adjust the height of various assistive devices for multiple classmates during lab with the guidance and feedback of the instructor
   P2.7 Propel a classmate in a wheelchair on both level and elevated surfaces in lab with the guidance and feedback of the instructor
P2.8 Provide effective verbal and visual instructions regarding weight bearing status and gait patterns using various assistive devices during lab with the guidance and feedback of the instructor
P2.9 Document lab activities and competency testing sessions in SOAP note format utilizing guidelines provided by instructor
P2.10 Measure and compare/contrast the gait of two classmates in lab with the guidance and feedback of the instructor
P2.11 Perform patient care skills utilizing safe body mechanics in lab with the guidance and feedback of the instructor
P2.12 Determine the appropriateness of a classmate’s wheelchair fit with the guidance and feedback of the instructor
P2.13 Provide effective verbal and visual instructions regarding wheelchair management and self-propulsion during lab with the guidance and feedback of the instructor

P3. Perform patient care skills repeatedly to make the movements more automatic and smooth (Practice)

P3.1 In small groups and as a class, compare and contrast observations of normal and abnormal gait patterns in lab
P3.2 Practice a variety of draping techniques specific to provided patient scenarios that maintain patient dignity, revealing only the treatment area necessary
P3.3 In large groups, work as a team to position a classmate in supine, sidelying, prone and sitting to decrease pressure on bony prominences and reduce contracture risk
P3.4 Demonstrate time management and responsibility by utilizing open lab hours to practice all patient care skills repeatedly until the movement patterns are automatic and smooth

P4. Make adjustments in the performance of patient care skills in order to perfect these skills (Adapt)

P4.1 Participate in a patient-centered interprofessional collaborative care experience by working with nursing students in the nursing simulation lab to provide a physical therapy treatment session for a clinical scenario provided.
P4.2 During competency tests, identify which CPT Code(s) you would bill for and the rationale for choosing the code(s).
P4.3 Demonstrate safe and effective instruction in various lower extremity weight bearing restrictions (weight bearing as tolerated, partial weight bearing, toe touch weight bearing, non-weight bearing, and full weight bearing) during competency testing, as outlined by the skill demonstration list and critical safety indicators
P4.4 Demonstrate safe and effective guarding technique during various transfers and gait training (on level and elevated surfaces) during competency testing, as outlined by the skill demonstration list and critical safety indicators
P4.5 Demonstrate safe and appropriate donning and doffing of gait belts and sterile/clean gloves during competency testing, as outlined by the skill demonstration list and critical safety indicators
P4.6 Demonstrate safe and effective gait training (on level and elevated surfaces) using a variety of properly fitted assistive devices during competency testing, as outlined by the skill demonstration list and critical safety indicators
P4.7 Demonstrate appropriate infection control techniques to control the spread of pathogens during competency testing, as outlined by the skill demonstration list and critical safety indicators
P4.8 Perform safe and effective methods of patient transfer techniques (including stand pivot, squat pivot and sliding board transfers) during competency testing, as outlined by the skill demonstration list and critical safety indicators
P4.9 In small groups, interview patients/clients, caregivers, and family to obtain current information related to prior and current level of function and general health status (e.g., fatigue, fever, malaise, unexplained weight change) during a supervised integrated clinical experience.
P4.10 In small groups, review health records (e.g., lab values, diagnostic tests, specialty reports, narrative, consults, and physical therapy documentation) to identify relevant data as it pertains to carrying out the PT plan of care during a supervised integrated clinical experience

P4.11 Demonstrate correct use of a draw sheet prior to correctly performing bed mobility during competency testing, as outlined by the skill demonstration list and critical safety indicators

P4.12 Consult the supervising PT (or course instructor/exam proctor) when there is a question about an unanticipated subject response to a therapeutic intervention

P4.13 Maintain the safety of all people involved by preparing a safe treatment environment and demonstrating safe and appropriate body mechanics during lab and competency testing

P4.14 Perform correct method of measuring vital signs (including blood pressure, heart rate, respiratory rate, and pain) and adjust treatment interventions accordingly during competency testing, as outlined by the skill demonstration list and critical safety indicators

P4.15 Demonstrate competence and effectiveness in educating a subject in wheelchair management and self-propulsion, propelling a subject in a wheelchair on both level and elevated surfaces in lab, and determining the appropriateness of the wheelchair fit during competency testing, as outlined by the skill demonstration list and critical safety indicators

P4.16 Demonstrate safe and competent psychomotor skills acquired in previous professional phase PTA courses (PTA 107)

P4.17 During lab scenarios, competency tests and practical examinations, practiced within the scope of practice of a PTA in New Jersey

Affective:
The learner will be able to successfully:

A1. Demonstrate professional behaviors consistent with the values of the profession (Generic Abilities)
   A1.1 Utilize professional and respectful communication styles utilized in a professional setting
   A1.2 Demonstrate a commitment to learning by attending class consistently and showing up on time
   A1.3 Demonstrate a commitment to learning by preparing for each class
   A1.4 Demonstrate the ability to manage time and resources effectively by completing assignments in a timely manner
   A1.5 Demonstrate the ability to receive feedback in a non-defensive and receptive manner
   A1.6 Take responsibility for the outcomes of personal and professional actions
   A1.7 Exhibit appropriate and professional conduct consistent with the values of the profession
   A1.8 Identify sources of stress and implement effective coping behaviors.
   A1.9 Demonstrate a commitment to the physical therapy profession
### Evaluation of learning

<table>
<thead>
<tr>
<th><strong>Grading</strong></th>
<th>% of grade</th>
<th>Activity</th>
<th>Number within course</th>
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<tbody>
<tr>
<td>48</td>
<td>Written Exams</td>
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<td>Quiz</td>
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<td>9</td>
<td>Competency Tests**</td>
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</table>

*The Practical Exam must be passed consistent with PTA program policies in the PTA program Learner handbook in order for a learner to pass the course.

** These tests take place outside of class time.

**Academic Integrity Statement:** There is a zero tolerance policy for plagiarism. Any work that violates the MCCC Academic Integrity policy will receive a grade of “0” and the learner will be reported to the College’s Academic Integrity Committee consistent with College policies. See [http://mlink.mccc.edu/omb/OMB210.pdf](http://mlink.mccc.edu/omb/OMB210.pdf)