



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:

1. Johansson, C., Chinworth, S.A., (2018), Mobility in Context: Principles of Patient Care Skills, 2nd edition, F.A. Davis: Philadelphia, PA. ISBN 978-0-8036-5817-2
2. Fruth, S.J., (2018), Fundamentals of Physical Therapy Examination, 2nd ed. Jones & Bartlett: Burlington, MA. ISBN 978-1-2840-9962-1
3. **Kinesiology text previously used in PTA 105:**
Lippert L, (2017). Clinical Kinesiology & Anatomy 6th ed., Philadelphia PA, FA Davis Publishers. ISBN 978-0-8036-5823-3
4. **Text Required for PTA 214 Physical Agents:**

Revision date: Fall 2023

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:

		MCCC Goals & Skills:	Course Learning Objectives:
<u>Unit 1</u>	Aseptic Technique & Vital Signs	1,2,3,4,8,9 A, B, C, D, E, F,G	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

		F,G	
Unit 2	Wheelchair Components and Fit Patient Positioning and Draping Body Mechanics	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	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	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	1,2,3,4,8,9 A, B, C, D, E,	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	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	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	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

Unit 10	Edema Management	1,2,3,4,8,9 A, B, C, D, E, F,G	C1.9, C1.18-1.19, C1.21, C1.23, C3.7, C4.2-4.3, P1.9, P2.9, P3.4, P4.1-4.2, P4.7, P4.12-4.13, P4.16-4.17, A1.1-1.9
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Learning Objectives have been identified in each of the following domains of learning:

Cognitive/Knowledge

The learner will be able to successfully:

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 ^X
- 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 ^X
- C1.8 Describe proper instruction for self-propulsion of a wheelchair ^X
- 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 ^X
- 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 ^X
- 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 ^X
- 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 ^X
- 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
- C1.33 Identify appropriate airway clearance techniques that can be used for patients with pulmonary dysfunction, including breathing exercises, coughing exercises and secretion mobilization^X
- C1.34 Describe isolation techniques as they relate to wound management and general diagnoses^X
- C1.35 Describe sterile technique as it related to wound management^X
- C1.36 Describe the application and removal of wound care dressings/agents, as well as the any precautions/contraindications^X
- C1.37 Identify the detrimental effects of poor posture to a patient
- C1.38 Explain interventions appropriate for the improvement of postural alignment while in various positions
- C1.39 Outline the process for gathering and documenting postural observations
- C1.40 Recall factors related to bone loss

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
- C2.14 Review an ethical case scenario and develop a personal plan of action that aligns with the profession's ethics and values^X

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^X
- C3.2 Predict the potential effects of improperly fitting assistive devices in small group discussions^X
- C3.3 Relate anatomic knowledge to positioning while positioning a classmate in supine, prone, side lying and sitting to prevent contracture development^X
- C3.4 Relate wheelchair fit to integumentary integrity^X
- 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^X
- 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^X
- C3.10 Using principles of kinesiology and physics, predict gait deviations based on weakness in small groups during lecture
- C3.11 Apply information from PTA 227 to identify appropriate billing codes for interventions provided
- C3.12 Relate PT interventions to the treatment of bone loss and the complications that arise from bone loss

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

C5.2 During lab activities, competency tests and practical exams, evaluate the subject and/or caregiver's ability to care for, utilize and appropriately adjust devices including wheelchairs, sliding boards, and assistive devices used during gait^X

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 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 during lecture and lab

P1.11 Observe the instructor model safe body mechanics during lecture and lab

P1.12 Observe the instructor determine appropriateness of wheelchair fit during lecture and lab

P1.13 Observe the instructor demonstrate effective verbal and visual instructions regarding wheelchair management and self-propulsion

P1.14 Listen to the instructor's verbal communication with subjects during demonstrations^X

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^X
- 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^X
- 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^X
- P2.13 Provide effective verbal and visual instructions regarding wheelchair management and self-propulsion during lab with the guidance and feedback of the instructor^X
- P2.14 Communicate effectively and professionally with subjects during labs, case scenarios, competency tests and practical examinations^X

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
- P3.5 Observe and identify faulty postural alignment as modeled by course instructor

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

- P4.1 Participate in a patient-centered inter-professional 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^X
- P4.2 During competency tests, identify which CPT Code(s) you would bill for and the rationale for choosing the code(s)^X
- 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^X

- 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^x
- 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^x
- 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^x
- P4.9 Demonstrate correct use of a draw sheet prior to correctly perform bed mobility during competency testing, as outlined by the skill demonstration list and critical safety indicators
- P4.10 Consult the supervising PT (or course instructor/exam proctor) when there is a question about an unanticipated subject response to a therapeutic intervention^x
- P4.11 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
- P4.12 Perform correct method of measuring vital signs (including blood pressure, heart rate, respiratory rate, and pain) before, during, and after treatment and take appropriate follow-up actions during competency testing, as outlined by the skill demonstration list and critical safety indicators^x
- P4.13 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^x
- P4.14 Demonstrate safe and competent psychomotor skills acquired in previous professional phase PTA courses (PTA 107)^x
- P4.15 During lab scenarios, competency tests and practical examinations, practice within the scope of practice of a PTA in New Jersey^x
- P4.16 During lab scenarios, competency tests and practical examinations, apply knowledge, theory, and clinical judgment while considering the patient and environment, based on the plan of care established by the physical therapist.^x
- P4.17 During lab scenarios, competency tests and practical examinations, effectively educate subjects using appropriate teaching methods^x
- P4.18 Utilize patient-sensitive language in verbal and written communication
- P4.19 Recognize and respond to subject response to changes in position and activities, including but not limited to orthostatic hypotension^x
- P4.20 Determine the subject's safety, status and progression during gait training^x
- P4.21 Determine the subject's safety, status and progression during wheelchair mobility and management^x
- P4.22 Respond effectively to subject and/or environmental emergencies that occur in the lab during instruction, practice and testing^x
- P4.23 Contribute to efforts to increase subject and clinician safety through the following means: prepare for lecture and lab activities, self-assess your physical and mental readiness to participate in program activities, provide feedback to classmates and instructors pertaining to safety issues, utilize infection control practices and best practice as presented throughout the PTA program as it relates to data collection and implementation of physical therapy interventions^x
- P4.24 Determine appropriate therapeutic interventions to address poor posture as modeled by course instructor
- P4.25 Implement therapeutic interventions on a classmate with the intention of improving postural alignment

Affective

The learner will be able to successfully:

A1. Receive Phenomenon

A1.1 Listen to others with respect

A1.2 Receive feedback professionally

A1.3 Attend class consistently

A1.4 Arrive to all classes and clinicals prior to the start time

A2. Respond to Phenomenon

A2.1 Participate in class

A2.2 Know the safety rules and practice them

A2.3 Respond to feedback in a professional manner

A2.4 Prepare for lectures, labs and clinicals ahead of time

A3. Value

A3.1 Demonstrate sensitivity to individual and cultural differences

A3.2 Show an ability to solve problems

A3.3 Inform PTAP faculty of matters one feels strongly about

A4. Organize

A4.1 Recognize the need for balance between educational and personal priorities

A4.2 Accept professional ethical standards, as evidenced by following them

A4.3 Prioritize times effectively to meet educational and personal needs

A4.4 Complete and submit all assignments, assessments, and required documents on time

A5. Internalize

A5.1 Show self-reliance when working independently

A5.2 Cooperate in group activities

A5.3 Revise judgments and changes behavior in light of new evidence and feedback

A5.4 Value people for who they are, not how they look

A5.5 Identify sources of stress and implement effective coping behaviors

A5.6 Demonstrate a commitment to the physical therapy profession

Evaluation of learning

Grading

% of grade	Activity	Number within course
50	Written Exams	5
2	Quiz	1
8	SOAP Notes	4
NA	Article Reviews	0
NA	Papers	0
NA	Presentation(s)	0
5	Generic Abilities Assessment	Continuous
25	Practical Exam*	1
10	Competency Tests**	4

*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>

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