



PTA 3

FOUNDATIONS OF PHYSICAL THERAPY II

SYLLABUS AND COURSE INFORMATION PACKET

Fall 2020

3 credits
1 hour lecture/ 4 hours lab

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**KINGSBOROUGH COMMUNITY COLLEGE
OF THE
CITY UNIVERSITY OF NEW YORK**

Physical Therapist Assistant Program

Course Syllabus

PTA 3

FOUNDATIONS OF PHYSICAL THERAPY II

Course Description: This course is a continuation of Foundations of Physical Therapy and is designed to introduce the student to gait deviations and ambulation activities using assistive devices and guarding techniques. Wheelchair activities are also presented. This course begins to consider the rehabilitation population including the effects of aging and the geriatric patient.

Textbook Requirement: Pierson, Frank M & Fairchild, Sheryl L. (2018) *Principles And Techniques of Patient Care. Sixth Edition*. Philadelphia, PA: W.B. Saunders Company.

Dreeben-Irimia, Olga (2019) *Introduction to Physical Therapy for Physical Therapist Assistant. Fourth Ed.* Sudbury, MA: Jones and Bartlett Publishers.

Lippert, Lynn (2017) *Clinical Kinesiology for Physical Therapist Assistants. Sixth Edition*. Philadelphia, PA: F.A Davis Company.

Skinner, S., McVey,C (2011). *Clinical Decision Making for the Physical Therapist Assistant*. Sudbury, MA: Jones and Bartlett Publishers.

Pre-requisite Courses: PTA 1, PTA 2, PTA 10, PTA 20, BIO 11

Student Learning Objectives

As evidenced by successful completion of written and practical examinations, lab activities, assignments, research article reviews, and the role playing and analysis of clinical scenarios, the student will:

1.0 Demonstrate an understanding of normal gait and gait deviations.

1.1. Identify the components of normal and abnormal gait.

1.2. Differentiate the components of abnormal gait.

- 1.3. Describe abnormal gait deviations via video presentations and role playing.
- 1.4. Document gait deviations.
- 1.5. Correlate gait deviations with muscular-skeletal structure and function.
- 1.6. Correlate gait deviations with pathological conditions.

2.0 Implement ambulation training activities.

- 2.1. Identify basic guarding techniques.
- 2.2. Identify different weight bearing statuses.
- 2.3. Identify ambulation devices and define their use in ambulation.
- 2.4. Identify and interpret ambulation techniques using different devices on level and uneven surfaces (stairs, ramps, carpet, etc.).
- 2.5. Identify specific crutch/cane gait patterns including: three point, two point, four point, swing to, and swing through.
- 2.6. Explain body mechanics and moving and lifting techniques as they relate to patient ambulation activities.
- 2.7. Discuss basic guarding techniques as they relate to proper body mechanics.
- 2.8. Interpret levels of assistance as they relate to ambulation activities.
- 2.9. Differentiate ambulation devices and their use in ambulation.
- 2.10. Distinguish appropriate uses of crutch/cane gait patterns.
- 2.11. Discuss different weight bearing statuses as they relate to different pathologies.
- 2.12. Perform ambulation activities on level and uneven surfaces using: walkers, axillary crutches, platform crutches, forearm crutches, straight canes, quad canes and hemi canes using full, partial and non-weight bearing statuses.
- 2.13. Implement specific crutch/cane gait patterns to pathological conditions.
- 2.14. Demonstrate safe guarding techniques during ambulation.
- 2.15. Properly measure walkers, crutches and canes.
- 2.16. Instruct peers in gait with assistive devices.
- 2.17. Assess balance and equilibrium reactions in terms of appropriate ambulation training.
- 2.18. Determine the appropriate ambulation techniques and equipment given patient pathologies, architectural barriers and balance deficiencies.
- 2.19. Delineate the progression of levels of assistance, weight bearing statuses and type of assistive device.
- 2.20. Analyze gait deviations for patients using ambulation devices.
- 2.21. Determine the procedure to be used given patient evaluation, short term goals, long term goals and plan of care for bed mobility, transfers and ambulation activities and their relationship to different pathologies.

3.0 Implement wheelchair training activities.

- 3.1. Identify the parts of a standard wheelchair.
- 3.2. Identify indications and uses of wheelchairs.
- 3.3. Identify the uses and training methods for motorized wheelchairs.
- 3.4. Outline the parts of a standard wheelchair.
- 3.5. Explain the indications and uses of wheelchairs.
- 3.6. Explain the uses and training methods for motorized wheelchairs as they

relate to different pathologies.

- 3.7. Perform sliding board, wheelchair to floor and floor to wheelchair transfers using sound principles of body mechanics.
- 3.8. Instruct peers in wheelchair transfers and wheelchair use.
- 3.9. Perform wheelchair to toilet transfers.

4.0 Implement bed mobility and transfer techniques with ambulation and wheelchair training.

5.0 Implement vital sign monitoring skills, bed mobility, draping, transfer, ambulation, wheelchair training with pathological conditions in different rehabilitation populations.

- 5.1 Perform skills appropriate to aging and geriatric patients.
- 5.2. Perform skills appropriate to acute, short term and long term care patients (considering short and long term goals).

6.0 Given patient scenarios, implement comprehensive physical therapy plan of care as directed by the physical therapist.

- 6.1. Perform therapeutic techniques demonstrating an understanding of the role of the physical therapist assistant in rehabilitation.
- 6.2. Perform therapeutic techniques appropriately employing universal precautions and sound body mechanics.
- 6.3. Perform therapeutic techniques demonstrating an understanding of organizational structure, levels of authority, and fiscal considerations of the health care delivery system..
- 6.4. Implement sound rationale when performing ambulation and wheelchair training considering specific characteristics of pathological conditions.
- 6.5 Identify patient progress as it relates to the achievement of short term goals.
- 6.6. Teach the uses, applications and responses of ambulation and wheelchair training activities, and concepts effectively with emphasis on safety and rationale.
- 6.7. Demonstrate the adjunctive nature of ambulation and wheelchair training by integrating their use in complete treatment applications.
- 6.8. Implement therapeutic interventions within the plan of care considering knowledge of assessment and measurement, pathology, kinesiology, anatomy, vital signs, and functional activities.
- 6.9. Implement therapeutic interventions within the plan of care demonstrating consideration of time management, therapeutic sequence and procedure selection issues.
- 6.10. Implement physical therapy interventions for a variety of patient types including: orthopedic, neurological and general deconditioned patients in a variety of settings.
- 6.11. Demonstrate appropriate documentation of physical therapy interventions considering patient response, precautions, treatment parameters, long/short term goals, and effectiveness.

- 6.12. Perform physical therapy interventions considering influencing factors (psychosocial, cultural, economic, legal/ethical, rehab. settings etc.).
- 6.13. Assist in discharge planning and alternative levels of care decision making.
- 6.14. Recognize patient response(s) that require the attention of the supervising physical therapist.
- 6.15. Communicate to supervising physical therapist the patient response to ambulation and wheelchair training.
- 6.16. Deduce the effectiveness of ambulation and wheelchair training techniques considering pathological conditions, attainment of short term goals and the patient's overall response.
- 6.17. Assess patient response to treatment and appropriately alter ambulation and wheelchair training techniques.
- 6.18. Verify the effectiveness of his/her teaching behavior by analyzing performance.
- 6.19. Delineate the beneficial and untoward effects of ambulation and wheelchair training techniques.
- 6.20. Analyze the relationship of gait deviations, ambulation and wheelchair training with vital signs, body mechanics, documentation, bed mobility/draping and transfer techniques, the principles of kinesiology, and pathology as they relate to the achievement of rehabilitation goals.

7.0 Demonstrate appropriate professional behavior.

- 7.1. Attend and be on time for class, lab, and scheduled appointments.
- 7.2. Be prepared for lab activities; attend to tasks assigned.
- 7.3. Accept constructive criticism and respond and/or follows through appropriately.
- 7.4. Express self in a clear and easily understood manner.
- 7.5. Maintain appropriate personal hygiene.
- 7.6. Treat others with positive regard, dignity and respect.
- 7.7. Analyze and examine professional literature considering: specific scientific methods, interpretation of results, and clinical significance in order to foster further personal investigation and clinical effectiveness.
- 7.8. Explain the importance of life long learning.
- 7.9. Describe how professional development can occur.

Student Assessment

As indicated in the student handbook, to receive a passing grade in this course the student must successfully complete all comprehensive examinations, assignments and the practical exam with a grade of "C" or better. Additionally, the instructor assesses student competencies in skills critical to this course using the standardized skills checklists, located in the laboratory, requiring a passing score of at least 90%. Critical skills in this course include:

1. Accurate measurement/fit of crutches, walkers and canes.
2. Employment of proper guarding techniques.
3. Instruction of gait with assistive devices including: walkers, crutches, and canes.

4. Instruction of stair climbing with assistive devices.
5. Instruction of wheelchair mobility.
6. Performance of safety assessments.
7. Reporting to supervising physical therapist.

Grade Determination

Clinical Presentations	10 %
Quizzes	25 %
Documentation Assignments	15 %
Practical Examination	30 %
Final Examination	<u>20 %</u>
	100 %

Clinical Presentations

The students in the class are divided into groups of 2 - 4. During the course, the groups perform a demonstration during week 12. The group presents a treatment based on a given evaluation of a mock patient demonstrating functional activities learned in class. Groups must work together to make clinical decisions based on the mock patient evaluation and plan of care. This group activity is worth fifteen percent of the final grade.

Quizzes

Students take multiple quizzes throughout the semester. Quizzes may be short-essay and multiple-choice type questions. The quizzes are worth twenty five percent of the final grade.

Documentation Assignments

Students document treatment ideas and justifications learned and performed during lab. This assignment also includes individual progress note writing with mock patient documentation (handwritten and computerized). Assignments are worth fifteen percent of the final grade.

Practical Examination

During finals week, student take a cumulative laboratory practical examination based on laboratory activities. The lab practical is worth thirty percent of the final grade.

Final Examination

Students take a cumulative final examination. This examination is worth twenty percent of the final grade.

****** Please note: All lectures will be posted to the content area of the Blackboard**

site for PTA 3 by Sunday of the week that the topic(s) are discussed. ****

All labs will be held on campus in groups in rooms S-124 and S – 246.

***** Students will require a laptop/tablet and internet access to log in to the CUNY Blackboard system *****

A student who requires assistance with hardware/computer needs please reach out to:

helpdesk@students.kbcc.cuny.edu

A Student who requires assistance with their Blackboard account or access please reach out to:

HelpDesk@Students.kbcc.cuny.edu

Attendance and Mandatory Attendance Verification:

Please refer to the attendance policy found on the last page of the course syllabus. Students must post to the “getting to know me” discussion by Saturday at 11:59 PM of week one to verify course attendance.

Week #1 and 2--Introduction to Ambulation Training

Lecture

Assignments: Pierson, Chapter 9

Post reply to Getting to know you discussion – mandatory for VOE -**By the end of Week 1**

Ambulation activities are introduced. Students begin to study the following topics: weight bearing statuses, types of equipment used for different weight bearing statuses, amounts of assistance and basic guarding techniques. Students learn how to instruct patient and family in the use of assistive devices.

Laboratory

Students begin to practice ambulation activities in the parallel bars and with walkers. Students are introduced to ambulation equipment including walkers (standard, platform and rolling) and axillary crutches. Proper measurement of walkers and axillary crutches is studied. Students are given mini patient scenarios with various orthopedic and neurological conditions.

Treatment Application Activity

Students exhibit critical thinking and sound technical skills in the management of a mock acute traumatic brain injured case as presented by the instructor and implement the prescribed plan of care. Students perform bed mobility, lifting, draping techniques, transfers and ambulation activities appropriate to this scenario. While performing interventions, students consider additional factors influencing patient care and the contemporary practice of physical therapy including, psycho-social issues and other

issues impacting the health care delivery system. Students practice reporting and documenting consequences of treatment to supervising physical therapist. Students perform discharge planning activities including, suggestion for home equipment and discharge alternatives. Following this treatment application activity, students discuss patient management and therapeutic techniques.

Week #3 and 4--Ambulation Training con't

Lecture

Assignment: Pierson Chapter 9

Discussion regarding crutch gait patterns continues such as: swing to, swing through, three point, and four point are presented. Indications for walkers and crutches are also discussed. Students are introduced to additional ambulation equipment including platform and forearm crutches and canes (straight, quad., and hemi). Measurement of this equipment is also instructed.

Laboratory

Students continue perform measuring and ambulation activities with walkers and crutches using different weight bearing statuses on level and uneven surfaces. Given patient scenarios, students must instruct mock patients in ambulation activities. Students must objectively document these activities.

Treatment Application Activity

Students exhibit critical thinking and sound technical skills in the management of a mock hip fracture case as presented by the instructor and implement the prescribed plan of care. Students perform bed mobility, lifting, draping techniques, transfers and ambulation activities appropriate to this scenario. While performing interventions, students consider additional factors influencing patient care and the contemporary practice of physical therapy including, psycho-social issues and other issues impacting the health care delivery system. Students practice reporting and documenting consequences of treatment to supervising physical therapist. Students perform discharge planning activities including, suggestion for home equipment and discharge alternatives. Following this treatment application activity, students discuss patient management and therapeutic techniques.

Week #5- Ambulation Training con't

Lecture

Assignments: Pierson, Chapter 9

Discussion of ambulation topics from previous weeks continue. Gait analysis and progression of devices is discussed in relationship to the use of assistive devices. Balance and equilibrium difficulties are studied.

Laboratory

Students practice ambulation activities with platform and forearm crutches and canes. The various crutch and cane gait patterns (three point, two point, etc.) are practiced. The

influence assistive devices have on balance and equilibrium is undertaken. Students apply these skills in assigned patient scenarios. Students continue to practice ambulation activities with all assistive devices, on level and uneven surfaces. Students practice assessing treatment goals outlined on mock patient evaluations.

Treatment Application Activity

Students exhibit critical thinking and sound technical skills in the management of an acute, obese, generally deconditioned mock patient with a cardiac history as presented by the instructor and implement the prescribed plan of care. Students perform bed mobility, lifting, draping techniques, transfers, ambulation and vital signs monitoring (previously learned in Bio 7 and PTA 1) appropriate to this scenario. While performing interventions, students consider additional factors influencing patient care and the contemporary practice of physical therapy including, psycho-social issues and other issues impacting the health care delivery system. Students practice reporting and documenting consequences of treatment to supervising physical therapist. Students perform discharge planning activities including suggestions for home equipment and discharge alternatives. Following this treatment application activity, students discuss patient management and therapeutic techniques.

Week #6 and 7 Wheelchair Mobility

Lecture

Assignments: Pierson, Chapter 7

During this week, the student is introduced to wheelchair (w/c) mobility. The student is instructed in the following topics: w/c prescriptions, parts of a w/c, w/c mobility, transfers (review of sliding board transfers, w/c to floor transfers, stand pivot) and w/c training. Students are also introduced motorized w/c use and training.

Laboratory

Students practice w/c mobility, and transfers. In addition, students practice teaching classmates w/c mobility skills including dependent and independent w/c mobility on uneven surfaces.

Treatment Application Activity

Students exhibit critical thinking and sound technical skills in the management of a mock spinal cord injury case as presented by the instructor and implement the prescribed plan of care. Students perform bed mobility, lifting, draping techniques, transfers, ambulation activities and wheelchair mobility appropriate to this scenario. While performing interventions, students consider additional factors influencing patient care and the contemporary practice of physical therapy including, psycho-social issues and other issues impacting the health care delivery system. Students practice reporting and documenting consequences of treatment to supervising physical therapist. Following this treatment application activity, students discuss patient management and therapeutic techniques.

Week #8 and 9—Wheelchair mobility

Lecture

Assignment: Pierson, Chapter 7

Wheelchair mobility discussion continues with topics that include proper wheelchair fit, and more independent advanced techniques like wheelies on even and uneven surfaces.

Laboratory / Treatment Application Activity

Practice of wheelchair mobility activities continues with an emphasis on advanced independent wheelchair mobility exercises including wheelchair to floor transfers. Students will also be practicing floor transfers with an assistive device.

Treatment Application Activity

Given patient scenarios (using examples of aging and geriatric patients), students perform all skills learned up to this point (documentation, measurements and assessments, vital signs, bed mobility, draping, transfer training, ambulation training, wheelchair training, gait analysis, etc.) for different pathological conditions including orthopedic, neurological, and general medical conditions. Students take patient scenarios through different rehabilitation settings. While performing interventions, students consider additional factors influencing patient care and the contemporary practice of physical therapy including, psycho-social issues and other issues impacting the health care delivery system. Students discuss patient management and therapeutic techniques.

Week #10 and 11 —Pathological Gait

Lecture

Assignments: Lippert Chapter 22 (review from PTA 1)

Discussion about normal gait continues from PTA 1. Pathological gait is introduced. Deviations are discussed in terms of deviations in muscle contraction / relaxation and their relationship to pathologies, such as those discussed in PTA 20. Documentation of gait deviations is also undertaken.

Laboratory

Students observe videos and classmates for gait deviations. Students document gait deviations and analyze what muscles are being affected. Considering information presented in patient scenarios, students predict types of gait deviations most likely to occur.

Week #12

Lecture

Assignment: Skinner Chapter 4
Review all material 0

Assistive device and wheelchair mobility techniques are reviewed. Critical thinking and clinical decision making are emphasized as it relates to a variety of patient scenarios and patient progression.

Laboratory/Treatment Application Activity

Students will practice pre-ambulation activities previously discussed as well as advanced ambulation techniques. In addition, students will practice their clinical skills by completing comprehensive mock patient scenario treatments that include current topics from this course and the concurrent course as well as previous course work.

**Access-Ability Services (AAS) serves as a liaison and resource to the KCC community regarding disability issues, promotes equal access to all KCC programs and activities, and makes every reasonable effort to provide appropriate accommodations and assistance to students with disabilities. Please contact this office if you require such accommodations and assistance. Your instructor will be glad to make the accommodations you need, but you must have documentation from the Access-Ability office for any accommodations.*

***Academic dishonesty is prohibited in The City University of New York and is punishable by penalties, including failing grades, suspension, and expulsion. Additional information can be found in the College catalog (<http://www.kingsborough.edu/sub-registration/Pages/catalog.aspx>). Plagiarism is a violation of academic integrity. Plagiarism is the intentional theft(s) of someone else's intellectual property without attribution (proper credit). Determination and penalty – ranging from grade reduction to course failure – will be decided by the instructor.*

****Class attendance is a vital part of the learning experience. A student who has been absent 15% or more of the total instructional hours that a class meets may be considered excessively absent by the instructor. The instructor may consider excessive absences as a factor in the assignment of a student's grade.*

******Class attendance is a vital part of the learning experience. A student who has been absent 15% or more of the total instructional hours that a class meets may be considered excessively absent by the instructor. The instructor may consider excessive absences as a factor in the assignment of a student's grade. Views of online materials will be tracked. Lack of viewing of online content for a week or module will be considered an absence unless extenuating circumstances are discussed with the course instructor in real time.***

*****The course professor utilizes a variety of teaching methodologies to facilitate accomplishment of student learning objectives. These methodologies may include interactive lecturing, supervised group and simulation activities, web-based instruction, use of custom computer based study guides, and active learning strategies.*