

The City University of New York
Department of Allied Health, Mental Health and Human Services

# PTA 2000 Pathology

Course Syllabus: Spring 2023

Co-requisites: PTA 1, PTA 2, PTA 10 Instructor: Dr. Michael Mattia

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Credit Hours: 3
Contact Hours: 3

Lecture: Friday 10:20 AM - 1:20 PM

### CATALOGUE DESCRIPTION

This course introduces the student to common pathologies managed, in part, by physical therapy. The pathologies introduced in this course are discussed and applied in courses throughout the curriculum. The course is divided into four distinct units of: orthopedic, neurological, cardiopulmonary, and acute medical conditions. The course presents general overviews of common pathologies including anatomical and physiological considerations, etiologies, and physical therapy management. Students complete electronic posters on assigned topics as well as engage in weekly group discussions and active learning activities.

### PROGRAM MISSION STATEMENT

The mission of the Physical Therapist Assistant program at Kingsborough Community College of the City University of New York is to: develop well qualified entry level physical therapist assistants who reflect the ethnic and cultural diversity of the community which the college serves and who function under the supervision of the physical therapist in a variety of physical therapy settings, capable of providing physical therapy treatments as outlined by the physical therapist to the satisfaction of the physical therapist. Further, the program will provide graduates who meet standards for licensure or registration as a physical therapist assistant in a variety of states. Additionally, the program's mission includes meeting the accreditation standards of the Commission on Accreditation in Physical Therapy Education for Physical Therapist Assistant Programs.



#### **CORE VALUES - C.O.R.E.**

COMPASSION Celebrating a diverse campus, local and global community of people and displaying professionalism and compassion in all interactions.

OPPORTUNITY Presenting current trends and future possibilities for career, academic and personal enrichment.

RESPECT Building mutual respect, integrity and confidence for ourselves, for others and for the environment.

EXCELLENCE Continually striving to achieve the highest standards and exhibit excellence in our programs and relationships with all stakeholders.

#### **PROFESSIONALISM**

The concept of professionalism in health care is motivated by the primary goal of providing quality service to the health care consumer. It is also a concept that involves a commitment to the development and maintenance of a level of knowledge, which enables the provider to utilize standards of care in the daily delivery of health care to the consumer. The program's dedicated faculty members provide students with the knowledge and background necessary to develop a sense of professionalism, which will extend into their career.

#### **OVERVIEW OF PROGRAM LEARNING OBJECTIVES**

This course begins to address the following PTA program learning outcomes:

- 1. Demonstrate PTA entry-level skills that are applicable to a variety of patient care settings and meet the needs of the community the college generally serves.
- 2. Demonstrate an awareness and commitment to patient dignity as well as social responsibility, citizenship, and advocacy related to the provision of PT services.
- 3. Recognize individual and cultural differences and respond appropriately in all aspects of physical therapy services.
- 4. Adjust interventions within the plan of care and report this and any changes in patient's status to the physical therapist as well as assist in complex interventions.
- 5. Recognize when intervention should not be provided due to changes in the patient's status and respond appropriately in emergency situations.
- 6. Recognize when the direction to perform an intervention is beyond that which is appropriate for a physical therapist assistant and initiate clarification with the physical therapist.
- 7. Demonstrate familiarity with NPTAE requirements, format, and test taking strategies to maximize future success potential

# **Student Learning Outcomes**

As evidenced by successful performance and completion of written examinations,



### reports and assignments the students will:

### 1.0 Demonstrate an understanding of general principles of disease and disease prevention.

- 1.1 Discuss the general causes and characteristics of disease.
- 1.2 Identify signs and symptoms associated with major health problems.
- 1.3 Identify implications health problems may have on the physical therapy program.
- 1.4 Describe and summarize methods of disease prevention.
- 1.5 Discuss the importance of universal precautions.
- 1.6 Distinguish the major components of universal precautions and isolation techniques.
- 1.7 Assess signs (observation, vital signs, etc.) and symptoms presented by a patient in order to make a judgment in relations to the patient's need for immediate medical supervision.

# 2.0 Demonstrate an understanding and recognition of common musculoskeletal pathologies and their management and interventions.

- 2.1 Explain the basic anatomy and function of the musculoskeletal system.
- 2.2 Describe the etiology, pathology, signs, symptoms and prognosis of common orthopedic disorder including: strains, sprains, joint derangements,
- 2.3 State medical management strategies for common musculoskeletal pathologies including secondary strategies such as contractures and impingement syndromes.
- 2.4 Summarize and list general physical therapy treatment goals for common orthopedic disorders including: strains, sprains, joint derangements, fractures and dislocations, bursitis, tendonitis, synovitis, capsulitis, arthritis, muscle contractures and spasm, scoliosis, back pain and osteoporosis.
- 2.5 Identify appropriate rehabilitation services to accomplish treatment goals.

## 3.0 Demonstrate an understanding and recognition of common neurological pathologies and their management and interventions.

- 3.1 Explain the basic anatomy and function of the nervous system.
- 3.2 Describe the etiology, pathology, signs, symptoms and prognosis of common neurological disorders including peripheral neuropathies, Parkinson's, multiple sclerosis, cerebral palsy, Alzheimer's, traumatic brain injury, cerebral vascular accident, and spinal cord injuries.
- 3.3 State medical management strategies for common neurological disorder including secondary strategies such as decubitus and contracture prevention.
- 3.4 Summarize general physical therapy treatment goals for common neurological disorders including peripheral neuropathies, Parkinson's, multiple sclerosis, cerebral palsy, Alzheimer's, traumatic brain injury, cerebral vascular accidents, and spinal cord injuries.
- 3.5 Identify appropriate rehabilitation services to accomplish treatment goals.

# 4.0 Demonstrate an understanding and recognition of common cardio-pulmonary disorders pathologies and their management and interventions.

- 4.1 Explain the basic anatomy and function of the cardiopulmonary systems.
- 4.2 Describe the etiology, pathology, signs, symptoms and prognosis of common cardiopulmonary disorder including chronic obstructive pulmonary diseases, pneumonia, cystic fibrosis, coronary artery disease, and myocardial infarction.
- 4.3 State medical management strategies for common cardiopulmonary disorders including secondary strategies such as early mobilization and



pulmonary hygiene.

- 4.4 Summarize and list general physical therapy treatment goals for common cardiopulmonary disorder including chronic obstructive pulmonary diseases, pneumonia, cystic fibrosis, coronary artery disease, and myocardial infarction.
- 4.5 Identify appropriate rehabilitation services to accomplish treatment goals.
- 5.0 Demonstrate an understanding and recognition of common medical conditions and their management and intervention.
- 5.1 Describe the etiology, pathology, signs, symptoms and prognosis of common medical conditions including diabetes mellitus, AIDS/HIV, secondary deconditioning, oncologic, and ventilation conditions.
- 5.2 State medical/surgical management strategies for common medical conditions including secondary strategies such as decubitus and early mobilization.
- 5.3 Summarize and list general physical therapy treatment goals for common medical conditions including: diabetes mellitus, AIDS/HIV, secondary deconditioning, oncologic, and ventilation conditions.
- 5.4 Identify appropriate rehabilitation services to accomplish treatment goals.

## 6.0 Demonstrate appropriate professional behavior

- 6.1 Attends and is on time for class, lab, and scheduled appointments.
- 6..2 Is prepared for activities; attends to tasks assigned.
- 6.3 Accept constructive criticism and respond and/or follow through appropriately.
- 6.4 Maintain appropriate personal hygiene
- 6.5 Treat others with positive regard, dignity and respect for diversity, equity and inclusion.
- 6.6 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.
- 6.7 Explain the importance of lifelong learning.
- 6.8 Describe how professional development can occur.

### **Assessment of Outcomes**

As indicated in the student handbook, to receive a passing grade in this course the student must successfully complete all comprehensive examinations, assignments with a grade of "C" or better. 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.



## **Required Textbooks**

Moini, J., Chaney, C. Introduction to Pathology for the Physical Therapist Assistant. 2<sup>nd</sup> Ed. 2021 Jones & Bartlett Learning ISBN9781284179361 Lippert, Lynn (2022) *Clinical Kinesiology and Anatomy*. SeventhEdition. Philadelphia, PA: F.A Davis ISBN-10 1719644527

#### Recommended:

Mosby (2021) Mosby's Dictionary of Medicine, nursing, and Health Profession. 11th ed. St. Louis, MO: Elsevier.

### **Grades** will be calculated according to college and departmental policy as follows:

This is the grading schematic for PTA program:

A+ 95-100 A 90-94 A- 88-89 B+ 85-87 B 80-84 B- 78-79 C+ 75-77 C 70-74

F < 70 and below W Withdrew without penalty WU Unofficial Withdrawal

Electronic Poster	15%	Electronic Poster Projects
Project		Each student will be required to create two electronic posters on an assigned topic. The electronic posters summarize a current topic derived from a newspaper or magazine related to a common pathology that is which physical therapy plays a collaborative role in management of a person's health. The specific format of the poster will be provided by the instructor. Electronic posters are uploaded to Blackboard for peer review and discussion.
Oral Presentation	5%	Topical Oral Presentation – via Blackboard Discussion
		Each week a group of students will be required to present a specific aspect of a pathology discussed in class. Each week the class will be subdivided into different discussion groups. These groups will be responsible for reviewing and discussing the displayed topic and preparing an oral presentation based upon their in-class discussion and research. One group will be selected to present each week. Each member of the group must participate equally in the oral presentation.
Multiple Choice	40%	The student completes a series of weekly quizzes derived from the course material presented in the preceding week.
Quizzes		
Mid-term	20%	The student takes a cumulative examination covering the first five to six weeks of the course. The examination includes
Examination		multiple- choice type questions.
Final Examination	20%	The final exam is cumulative for the entire semester's work consisting of multiple-choice questions.

## Attendance, Participation, and Universal Learning

Attendance and participation are highly important in this small, collaborative, remote class. If the student must be absent because of an emergency or illness, please make every effort to speak with professor about it beforehand, if possible, or after the next class. The professor will excuse such absences with a doctor's note or other form of official documentation. Although the student is excused from attending class, the student is not excused from completing the work for that day. The faculty is committed to the principle of universal learning. This means that our classroom, our virtual spaces, our practices, and our interactions be



as inclusive as possible. Mutual respect, civility, and the ability to listen and observe others carefully are crucial to universal learning. Active, thoughtful, and respectful participation in all aspects of the course will make our time together as productive and engaging as possible. The professor will give the student feedback on their performance and participation.

#### **Policies and Procedures**

The Department of Allied Health, Mental Health and Human Services adheres to the Policies and Procedures on Academic Integrity as set forth by CUNY. 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 <a href="http://www.kingsborough.edu/sub-registration/Pages/catalog.aspx">http://www.kingsborough.edu/sub-registration/Pages/catalog.aspx</a>. 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.

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, connectivity issues, email problems or gaining access to their Blackboard account please reach out to: HelpDesk@Students.kbcc.cuny.edu

Students are expected to take all tests when scheduled. Students who are absent on the day of an exam will be expected to take the exam on their return to class. Students who fail to take the scheduled exams or makeup will receive a grade of zero for that test.

All written assignments must comply with college standards for written work. Specific assignment directions and requirements are provided for each assignment. Any weekly written assignments are posted on Saturday morning. Assignments posted on Saturday are due by the following Friday at 11:59pm unless otherwise stated in the assignment directions. Written assignments, other than discussion board threads are to be submitted as per assignment directions. A late assignment will meet the requirements of the course but will not receive full credit.

If written assignments are not submitted by the end of the course, the student will receive a grade of "0" for each incomplete assignment. Refer to the PTA Student Handbook for complete program policies and procedures.

### STUDENT SUPPPORT SERVICES

Students who need an accommodation for a disability, during their time at Kingsborough Community College should make an appointment with the **Access-Ability Office** in Room D205 at 368-5175. 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 effort to provide appropriate accommodations and assistance to students with disabilities. The professor will be glad to work with the student to provide necessary guidance and accommodations as needed.

# Access Resource Center (Room E-115)

Your one-stop place to get connected to government benefits and resources. Whether it's childcare, SNAP, clothing, or transportation, you can get a referral for what's available to you – where you live and when you need it.

FREE services include Benefits Screening, Legal Consultation, Financial Consultation and Tax Preparation, lists of jobs, housing, pantries, Distribution of FREE vegetables grown on campus at the KCC Urban Farm

Distribution of FREE food staples at the KCC Food Pantry, Clothing donations, Assistance with recertification of benefits, Fair Hearing Assistance and Assistance obtaining other government resources.

All services are FREE. Walk-ins are always welcome.



### **Counseling Services**

#### **Room D-102**

All Kingsborough students are eligible to receive free and confidential personal counseling through the Counseling Services Center, where they will find a staff of trained and caring mental health practitioners who are committed to providing high-quality services, in a safe, supportive, and judgment-free environment, while always respecting students as individuals and as members of a diverse school community.

### **NETIQUETTE**

Each student is encouraged to take an active part in class discussions and activities. Honest and respectful dialogue is expected. Disagreement and challenging of ideas in a supportive and sensitive manner is encouraged. Hostility and disrespectful behavior are not acceptable. Just as we expect others to listen attentively to our own views, we must reciprocate and listen to others when they speak, especially when we disagree with them.

- 1. Be mindful that electronic communication does not convey facial expression or tone of voice. It is important to consider what is written could be misinterpreted.
- 2. Typing messages all in caps is regarded by most internet uses as shouting; so, unless you mean to yell at someone, type your message in standard format.
- 3. It is appropriate to share your point of view as well as indicate disagreements with another's posts, however, it is not okay to make negative personal statements about another's posts.
- 4. Clearly indicate the nature of your email messages.
- 5. It you send an email from a personal email account, sign the message. Often the names of personal email accounts are different from a person's given name. Use the KCC email whenever possible.

### **EQUITY, CIVILITY, RESPECT for DIVERSITY and INCLUSION**

Respect for the opinions of others is very important in an academic environment. Courteous behavior and responses are expected. Therefore, in this classroom, any acts of harassment and/or discrimination based on matters of race, gender, sexual orientation, religion, and/or ability is not acceptable. Students, faculty, and staff have a right to be in a safe environment, free of disturbances in all aspects of human relations. Incivility will not be tolerated. The PTA program strives to create a learning environment for its students that supports a diversity of thoughts, perspectives and experiences, and honors student identities (including race, gender, class, LGBTQAI+, religion, ability, etc.) To help accomplish this, if a student has a name and/or set of pronouns that differ from those that are traditionally used, please communicate this to the professor. The PTA program faculty are dedicated to our students and as such if any student experiences any issues regarding diversity, equity and inclusion, the student is encouraged to reach out to the professor and/or department. All student concerns are treated with the utmost confidentiality.

### **Religious/Cultural Observance**

Persons who have religious or cultural observances that coincide with this class should let the professor know in writing by e-mail one week in advance of your respective observance. Students may be excused from the class, but students are not excused from course requirements. The timely submission of assignments or the make-up of exams should be discussed with the professor.



	Week to Week Course Agenda			
12-week semester	Topic and Objectives of the week	Reading Assignments	Written Assignments	Assignments and Due Dates
Week 1 3/6-3/11	Introduction to Disease Inflammatory Response, Disease Prevention, and Non-Pathological Consequences of Aging This week's lectures introduce students to common terminology associated with pathology.	Read: Moini Chapter 1, 2, 3	Post "getting to know you" on Bb Discussion Bb topical discussion	<ul> <li>Reading Summary 1</li> <li>BB Discussion</li> <li>Initial Post on Bb by 3/8 @ 11:59 PM</li> <li>Reply post by Thursday @ 11:59 PM</li> <li>Due Date: 3/17</li> </ul>
Week 2 3/12- 3/18	Introduction to Common Orthopedic Pathologies These initial lectures introduce the student to principles of disease and disease prevention. Universal precautions are presented. A broad overview of the musculoskeletal system is provided (concurrent in-depth exploration in Bio 11 and reviewed in PTA 2). General etiologies of orthopedic pathologies are discussed. General physical therapy treatment and rehabilitation goals are discussed.	Read: Moini Chapter 9 & 10	Bb topical discussion	<ul> <li>Reading summary 2</li> <li>Quiz 1</li> <li>Bb Discussion due 3/15 @11:59PM</li> <li>Initial Post on Bb by Tuesday</li> <li>Reply post by Thursday</li> <li>Due Date: 3/18</li> </ul>
Week 3 3/19- 3/25	Common Orthopedic Pathologies continued: Specific disorders of the bones and joints are reviewed. Common fractures (Colles, malleolar, humeral, hip, etc.) are presented.	Read: Moini Chapter 11	Bb topical discussion	<ul> <li>Reading summary 3</li> <li>Quiz 2</li> <li>Bb Discussion by 3/22 @ 11:59 PM</li> <li>Reply post by Thursday.</li> <li>Due Date: 3/25</li> </ul>



Week 4 3/26-4/4	Rheumatoid and osteoarthritis are discussed. Joint stiffness due to immobilization, trauma, and surgical conditions are reviewed. Physical therapy intervention and goals of treatment are presented and discussed. Student explore etiologies, signs, symptoms, and treatment of bursitis, capsulitis, ligament sprains, and cartilage injury. Common pathologies such as sub deltoid bursitis ankle sprain, ligament sprain, and meniscal injuries are reviewed. Muscle strains and tears, their treatment and etiologies are explored.  Common Orthopedic Pathologies continued: Discussion of muscular pathologies is completed. Etiologies, signs, symptoms and interventions of common disorders of the spine are reviewed. Specific attention is given to scoliosis, low back and cervical pain, spondylosis, and degenerative disc disease.	Read : Moini Chapter 9, 10	Bb topical discussion	<ul> <li>Reading summary 4</li> <li>Quiz 3</li> <li>Bb discussion due 3/29 @ 11:59 PM</li> <li>Initial Post on Bb by Wednesday</li> <li>Reply post by Thursday @ 11:50 PM</li> <li>Due date: 4/4</li> </ul>
4/5-4/13	Spring Recess	Review	Deep Breath and keep studying	
Week 5 4/14 – 4/22	Common Neurological Disorders A broad overview of the human nervous system is presented (concurrent in-depth study in Bio 11). Differences between central nervous system and peripheral nervous system disorders are distinguished. General etiologies, and treatment goals are discussed	Read : Moini Chapter 12	Bb Topical Discussion	<ul> <li>Reading summary 5</li> <li>Quiz 4</li> <li>Bb Discussion due 4/19 2 11:59 PM</li> <li>Reply post by Thursday @ 11:59 PM</li> <li>Due Date: 4/22</li> </ul>



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Week 6 4/23 – 4/29	Common Neurological Disorders continued: The signs, symptoms, etiologies and intervention of specific neurological disorders are reviewed including Parkinson's, multiple sclerosis and other degenerative diseases, cerebral palsy, Alzheimer's and traumatic brain injury.	Read : Moini Chapter 13	Bb Topical Discussion	<ul> <li>Reading summary 6</li> <li>Quiz 5</li> <li>Bb Discussion due by 4/26 @ 11:59 PM</li> <li>Reply post by Thursday @ 11:59 PM</li> <li>Due date: 4/29</li> </ul>
Week 7 4/30-5/6	Common Neurological Disorders continued: This week's lecture explores the etiology, signs, symptoms, prognosis and treatment of Cerebral Vascular Accident. A broad overview of the vascular anatomy of the brain is presented in relation to pathological impact. Intervention approaches and goal are reviewed.	Read : Moini Chapter 13	Bb Topical Discussion	<ul> <li>Midterm Exam</li> <li>Bb Discussion due by 5/3 @ 11:59 PM</li> <li>Reply post by Thursday @ 11:59 PM</li> <li>Reading summary 7</li> <li>Due date: 5/6</li> </ul>
Week 8 5/7-5/13	Common Neurological Disorders continued: This week's lectures present the etiology, signs, symptoms and treatment of spinal cord injuries. The functional organization of the spinal cord is reviewed. Emphasis is placed on levels of injuries, functional consequences, and secondary conditions. Psychosocial impacts of spinal cord injuries are discussed.	Read : Moini Chapter 13	Bb Topical Discussion	Bb Discussion due 5/10 @ 11:59 PM Reply post by Thursday 5/11 @ 11:59 PM Reading summary 8 Quiz 6 Electronic poster Presentation Due date:5/13
Week 9 5/14- 5/20	Common Cardiopulmonary Disorders A broad overview of the	Read: Moini Chapter 3 & 4	Bb Topical Discussion	Bb Discussion due by 5/17 @ 11:59 PM



	Cardiopulmonary system is presented. General etiologies, signs, symptoms, and physical therapy interventions are reviewed.			<ul> <li>Reply post by Thursday by 5/18 @ 11:59 PM</li> <li>Reading summary 9</li> <li>Quiz 7</li> <li>Due date: 5/20</li> </ul>
Week 10 5/21 – 5/27	Common Cardiopulmonary Disorders continued: Specific pathologies of the cardiopulmonary system are explored including chronic obstructive pulmonary diseases, pneumonia, coronary artery disease, and myocardial infarction. Physical therapy interventions and goals are reviewed.	Read: Moini Chapter 14	Bb Topical Discussion	<ul> <li>Bb Discussion due by 5/24 2</li> <li>11:59 PM</li> <li>Reply post by Thursday @</li> <li>11:59 PM</li> <li>Reading summary 10</li> <li>Quiz 8</li> <li>Due date: 5/27</li> </ul>
Week 11 5/28 - 6/3 College Closed for Memorial Day 5/29	Common Acute Medical Conditions The function, goals and characteristics of the acute medical facility are briefly reviewed (learned in PTA 10). General etiologies of pathologies are discussed. General physical therapy treatment goals are also discussed. The student is introduced to specific conditions encountered in the acute care facility.	Read: Moini 15, 16, Chapter 9 & 10, 13	Bb Topical Discussion	<ul> <li>Bb discussion due by 5/31 @ 11:59 PM</li> <li>Reply post by Thursday due by 11:59 PM</li> <li>Reading summary 10</li> <li>Quiz 9</li> <li>Due date: 6/3</li> </ul>
Week 12 6/4-6/8	Discussions of specific conditions and their physical therapy interventions and goals are continued. General medical and surgical, deconditioning, vascular, oncologic, and ventilation conditions are considered.	Read: Moini Chapter 17, & 21, 22	Bb Topical Discussion	<ul> <li>Bb Discussion due by 6/7 @ 11:59 PM</li> <li>Reply post by Thursday @ 11:59 PM</li> <li>Reading Summary</li> <li>Quiz 10</li> <li>Due date: 6/8</li> </ul>
Final Exams 6/12- 6/16	Study and Review		Final Examination days and times TBD	Final Examination

The above dates are subject to change. Professor will notify class of any changes via Blackboard announcements.



