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

PTA 500 Therapeutic Exercise

Course Syllabus: Fall 2025
Prerequisites: PTA 1, PTA 10, PTA 20, PTA 2, PTA 3, BIO 11
Co-requisites: PTA 4, BIO 12

Credit Hours: 5
Contact Hours: 8
Lecture: Mon./Wed 8:00am-9:00am
Lab: Mon/Wed 9:10am- 12:30 pm

Instructor: Prof. Christina McVey
Office: S129
Phone: 718-368-5727
e-mail: christina.mcvey@kbcc.cuny.edu

Welcome

Congratulations on successful completion of the first Spring semester and summer module. I am Prof. McVey, and I will be your instructor. I encourage you to take the time to read this syllabus for our class so that you can learn more about what to expect.

About the Professor

Hello, my name is Prof. Christina McVey. I am one of two full-time faculty within the Physical Therapist Assistant (PTA) program. I have been at Kingsborough since the inception of the PTA program over 20 years ago. I teach PTA 10 Introduction to Physical Therapy, PTA 1 and 3 Foundations in Physical Therapy I and II, PTA 5 Therapeutic Exercise, PTA 6 Clinical Practicum I and PTA 8 Selected Topics in Physical Therapy. Besides teaching full time, I am also the Academic Coordinator for Clinical Education for the PTA program. If you have any questions regarding future clinical affiliations, please do not hesitate to contact me. I look forward to a successful and productive semester.

Where to find me: S129 In addition, please free to contact me via email. I will attempt to return emails within 24 hours. Monday-Thursday from 8am-5pm. Office Hours Monday 7:30am-8am; Monday and Wednesday 12:30pm-2:30pm in S129. Please do not hesitate to utilize my office hours for any questions and

concerns.

I believe that each student has the potential to succeed in this class. I recognize that each student learns differently, and I try to design my classes with a variety of learning experiences. I advise all students to utilize their unique learning styles to help them succeed in this program. I am here to support you throughout this course and strongly encourage all students to reach out to me at any time throughout the course.

COURSE DESCRIPTION

This course is designed to introduce students to therapeutic exercise techniques. Manual muscle testing is presented and practiced. Topics including resistive exercise, passive stretching, and range of motion techniques are studied. Students are introduced to therapeutic exercise equipment such as: computerized isokinetic testing and exercise systems, variable resistance and other free standing resistive exercise equipment, ergometers, treadmill, and basic exercise equipment including cuff weights and elastic resistive equipment. Therapeutic exercise techniques are studied by anatomical regions.

How this Course Works

- This is a 12-week in person lecture course that meets two days a week for 1 hour of lecture and 3 hours of lab each day.
- Material including PowerPoints, assignments, discussions and course announcements will be posted on Brightspace.
- This course is organized into weekly topics that are provided on the weekly course calendar at the end of this syllabus.
- There will be a number of quizzes and assignments throughout the semester in addition to a midterm, lab practical and final exam.

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

The core values for physical therapist assistants must be exhibited throughout this course. The values of accountability, altruism, integrity, duty, collaboration social responsibility, excellence, compassion and caring coalesce to develop students into the most effective physical therapist assistant possible.

PROFESSIONALISM

Physical therapist assistants interact with a wide variety of health care professionals including physicians, rehabilitation therapists, social workers, hospital administrators and others. Therefore, physical therapist assistants must possess and demonstrate the characteristics of professionalism that include competence, integrity, appropriateness, knowledge, conscientiousness, respect, confidence, and emotional intelligence. Along with the aforementioned core values during this course students are encouraged to be proactive in exhibiting and practicing the characteristics of professionalism.

OVERVIEW OF PROGRAM LEARNING OBJECTIVES FOR THIS COURSE

This course begins to address the following PTA program learning outcomes:
-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.
-Demonstrate an awareness and commitment to patient dignity as well as social responsibility, citizenship, and advocacy related to the provision of PT services.
-Recognize individual and cultural differences and respond appropriately in all aspects of physical therapy services.
-Demonstrate competence in implementing and adjusting selected components of interventions identified in the plan of care established by the physical therapist.
-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.
-Recognize when intervention should not be provided due to changes in the patient's status and respond appropriately in emergency situations.
-Demonstrate competency in performing components of data collection skills essential for carrying out the plan of care.
-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.
-Communicate an understanding of the plan of care developed by the physical therapist to achieve short- and long-term goals and intended outcomes.
-Complete thorough, accurate, logical, concise, timely, and legible documentation that follows guidelines and specific documentation formats required by state practice acts, the practice setting and other regulatory agencies.
-Demonstrate competency in the use of information technology.
-Participate in educating and providing patient-related instruction to patients, family members, and caregivers based on the plan of care.
-Read and understand health care literature, identify career development and lifelong learning opportunities for the physical therapist assistant
-Exhibit conduct that reflects practice standards that are legal, ethical and safe.

Student Learning Outcomes

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

1.0 Apply principles of therapeutic exercise.

1.1 Identify the principles of range of motion, resistive exercise and manual muscle testing.
1.2 State the general principles of exercise including endurance, power, cardiovascular effects, and psychomotor considerations.
1.3 State the indications and contraindications to therapeutic exercise.
1.4 Identify the effects of pain on therapeutic exercise.

1.5 Identify components of an exercise program.
1.6 State the criteria for progressing a patient's exercise program.
1.7 Identify principles of passive stretching, including self-stretching.
1.8 List the indications and contraindications of passive stretching.
1.9 Discuss physiological and psychological impacts on therapeutic exercise.
1.10 Differentiate the various modes of range of motion including: active, assistive and passive.
1.11 Describe the rationale for the selection of various range of motion techniques, while recognizing normal and abnormal patient movement.
1.12 Distinguish the various types of resistive exercise including: manual resistance, isotonic, isometric, isokinetic and open and closed chain.
1.13 Discuss the indications and contraindications of resistive exercise, range of motion and manual muscle testing.
1.14 Monitor mock patients' endurance while performing therapeutic exercise and alter intervention appropriately within the plan of care.
1.15 Distinguish the differences in manual muscle testing grades.
1.16 Outline the procedures in manual muscle testing.
1.17 Perform manual muscle testing for upper and lower extremity musculature using standard techniques and hand-held digital dynamometers.
1.18 Correlate different exercise regimens with mechanical principles influencing effectiveness.
1.19 Define and discuss the principles of aerobic exercise and conditioning.
1.20 List the beneficial effects of aerobic exercise.
1.21 List indications and contraindications of aerobic exercise such as oxygen saturation.
1.22 Implement aerobic exercise activities to enhance general fitness.
1.23 Perform aerobic therapeutic exercise appropriate for the cardiovascular impaired patient including assessment of oxygen saturation and vital signs.
1.24 Recognize signs and symptoms of distress (cardio-pulmonary, fatigue, etc.) associated with the performance of therapeutic exercise activities.

2.0 Implement therapeutic exercise interventions for upper and lower extremities.

2.1 Identify proper technique in range of motion activities and manual muscle testing.
2.2 Identify therapeutic exercise equipment commonly used in physical therapy practice.
2.3 State the rationale for therapeutic exercise.
2.4 Outline the techniques of therapeutic exercise as applied to different regions of the body.
2.5 Describe factors affecting outcomes of therapeutic exercise.
2.6 Describe the factors affecting selection of therapeutic exercise equipment.
2.7 Implement therapeutic exercise and stretching techniques and concepts.
2.8 Demonstrate proper technique in range of motion and resistive exercise techniques.
2.9 Demonstrate safe use of therapeutic exercise equipment.
2.10 Perform various resistive exercise including: manual resistance, isotonic, and isokinetic activities during patient scenarios.

3.0 Given mock patient scenarios, implement comprehensive physical therapy plan of care as directed by a physical therapist.

3.1 List effective strategies in teaching therapeutic exercise techniques.
3.2 Explain patient response to therapeutic exercise.

3.3 Link pathological conditions and patient problems with appropriate therapeutic exercises and exercise equipment.
3.4 Recognize aspects of the plan of care that may be outside the PTA's scope of practice and act accordingly.
3.5 Perform therapeutic exercise techniques identifying the role of the physical therapist assistant in rehabilitation.
3.6 Perform therapeutic techniques appropriately employing universal precautions and sound body mechanics.
3.7 Perform therapeutic techniques demonstrating an understanding of organizational structure, levels of authority, and fiscal considerations of the health care delivery system.
3.8 Demonstrate proper manual muscle testing technique while considering pathological conditions.
3.9 Select appropriate therapeutic exercise based on manual muscle testing results
3.10 Implement thermal modalities in conjunction with therapeutic exercise techniques.
3.11 Describe rationale when selecting therapeutic exercise activities, considering specific characteristics of pathological conditions.
3.12 Identify patient progress as it relates to the achievement of short-term goals.
3.13 Teach the uses, applications and responses of therapeutic exercise and therapeutic exercise concepts to mock patient, family and other healthcare workers with emphasis on safety and rationale as directed by the physical therapist.
3.14 Demonstrate the adjunctive nature of therapeutic exercise by integrating their use in complete treatment applications.
3.15 Implement therapeutic interventions within the plan of care considering knowledge of assessment and measurement (including goniometry), functional activity, modality and therapeutic exercise skills on mock patients.
3.16 Implement therapeutic interventions within the plan of care demonstrating consideration of time management, therapeutic sequence and procedure selection issues.
3.17 Implement physical therapy interventions for a variety of mock patient types including: orthopedic, neurological, and general deconditioned patients in a variety of settings.
3.18 Devise and teach home maintenance program for a variety of diagnoses.
3.19 Demonstrate appropriate documentation of therapeutic exercise interventions considering patient response, treatment parameters, long/short term goals, and effectiveness.
3.20 Perform mock physical therapy interventions considering influencing factors (psychosocial, cultural, economic, legal/ethical, etc.).
3.21 Assist in discharge planning and alternative levels of care decision making with supervising physical therapist.
3.22 Associate patient verbal and non-verbal response with effectiveness of therapeutic exercise procedures employed.
3.23 Communicate to supervising physical therapist the patient's response to therapeutic exercise.
3.24 Deduce the effectiveness of therapeutic exercise considering pathological conditions, attainment of short-term goals and the patient's overall response.
3.25 Assess patient response to treatment and appropriately alter therapeutic intervention within the plan of care.
3.26 Verify the effectiveness of his/her teaching behavior by analyzing performance.
3.27 Delineate the beneficial and untoward effects of therapeutic exercise.
3.28 Analyze the relationship of therapeutic exercise with other therapeutic procedures (modalities, range of motion, functional activities) as they relate to the achievement of rehabilitation goals.
3.29 Recognize patient response(s) that require the attention of the supervising physical therapist or immediate interventions such as basic first aid or

cardiopulmonary resuscitation and take appropriate action.

4.**0** **Demonstrate the ability to express ideas in writing.**

4.1 Perform free write assignments.

4.2 Summarize and analyze academic experiences.

4.3 Effectively organize thoughts and ideas.

5.0 **Demonstrate appropriate professional behavior.**

5.1 Attend and be on time for class, lab, and scheduled appointments.

5.2 Be prepared for lab activities; attend to assigned tasks.

5.3 Accept constructive criticism and respond or follow through appropriately.

5.4 Express self in a clear and easily understood manner.

5.5 Maintain appropriate personal hygiene.

5.6 Treat others with positive regard, dignity, and respect.

5.7 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.

5.8 Explain the importance of lifelong learning.

5.9 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 and practical examination 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 performance manual muscle testing of major extremity musculature
2. Performance therapeutic exercise techniques (active, passive, resistive) for the shoulder, elbow, wrist, hand, hip, knee, ankle and foot.
3. Organization of exercise programs considering pathological conditions
4. Teaching therapeutic exercises to peers and instructor.
5. Conveying information about exercise program and patient status to supervising therapist.

Required Textbooks

Kisner, C., Colby,L., (2023). ***Therapeutic Exercise Foundations and Techniques*** Seventh Edition. Philadelphia, PA: F.A. Davis Company.

Pierson, Frank M & Fairchild, Sheryl L. (2022*)* ***Principles and Techniques of Patient Care***. Seventh Edition. Philadelphia, PA: W.B. Saunders Company.

Hislop, Helen, Avers, D. and Brown, M. (2019). ***Daniel and Worthingham Manual Muscle Testing***, 10th Edition. Philadelphia, PA: W.B. Saunders Company.

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

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			

How are grades determined: Grades will be posted on Blackboard; students can track their progress throughout the class.

Research Article Paper	5%	Students are assigned to find a current research article pertaining to therapeutic exercise. The student must summarize and critique the article and submit it to the instructor during week six.
Documentation Assignments	5%	A Students document exercises and justifications learned and performed during lab. This assignment includes exercise writing assignments as well as mock patient documentation (handwritten and computerized).
Home Exercise Program	15%	Students are given two physical therapy evaluations and plan of cares and must design one exercise program using one traditional (due week 8) and one multimedia (due week 12) format. Outline of the project will be distributed in class.
Lab Practical	25%	All students are required to take a practical examination. This examination tests the students' proficiency in therapeutic exercise and previously learned material.
Quizzes	15%	Students take weekly quizzes throughout the semester. Quizzes are short-essay and multiple-choice type questions.
Mid-term Examination	15%	The student takes a cumulative examination covering the first five to six weeks of the course. The examination includes mainly multiple-choice type questions.
Final Examination	20%	The student takes a cumulative final examination. The examination includes mainly multiple-choice type questions.
Writing Exercises		The student participates in writing exercises throughout the semester. These non-graded writing exercises are designed to promote understanding of concepts and encourage written communication. For example, students may present a power point presentation on orthopedic conditions and interventions as it relates to their reading assignments.

Success Kit

Keys to success in this class include:

- Complete reading assignments prior to class and take notes on readings.
- Attend class and be an active participant in class discussions.
- Take notes in class and do not rely solely on ppts.
- Do not wait till the night before to begin studying for an exam and continue to review all material as exams are cumulative.
- Complete all assignments on time.
- At the first signs of difficulty understanding the material, come speak to me.
- Utilize the Program's tutor and open lab time.

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 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.

Students will require a laptop/tablet and internet access to log in to the CUNY Brightspace system.
A student who requires assistance with hardware/computer needs, connectivity issues, email problems or gaining access to their Brightspace 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 makeups will receive a grade of zero for that test.

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.

Single Stop, Room V-231, ext. 5411

Single Stop connects Kingsborough students to the benefits and resources for which they may qualify. A free 15-minute benefits screening can potentially point the way to help with rent, groceries, and/or health insurance. In addition, students can receive the following free services; legal aid; financial counseling; and tax preparation.

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.

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 Lecture	Reading Assignments	Lab	Assignments and Due Dates
Week 1	**Principles of Therapeutic Exercise** This initial week students are introduced to the systematic approach to therapeutic exercise. Emphasis is placed upon the need for critical thinking, identifying impairments, and functional limitations. Goal setting, exercise terminology, indications and contraindications and functional outcomes are presented. Principles of manual resistance are explained.	Read: Kisner Chapter 1, 3 and chapter 4 pp. 86-116 Pierson Chapter 6 Review Week 1 – Lecture and Lab	Students practice passive and active range of motion techniques of both upper and lower extremities previously learned in PTA 1. Students perform general passive stretching techniques. Manual muscle testing is demonstrated and students practice positioning, hand placement and grading techniques in specific scenarios. *Treatment Application Activity* Students exhibit critical thinking and sound technical skills (transfers, goniometry and range of motion) in the management of a spinal cord injured mock patient as presented by the instructor and implement the prescribed plan of care. Following this treatment application activity, students discuss patient management and therapeutic techniques.	**Lab Assignment:** PROM exercises Quiz
Week 2	**Principles of Resistive Exercise/Cardio-vascular Considerations** Students are provided the definition of resistive exercise including: goals, indications and contraindications. Concepts of strength and endurance	Assignments: Kisner - Chapter 6 pp. 170-205 and 7 and Hislop, introduction Review Week 2 – lecture and lab	Students perform exercises appropriate for cardiovascular patients. Students practice assessing oxygen saturation levels. Given patient scenarios, students perform therapeutic exercise techniques consistent with principles of energy expenditure for the cardiac patient while at the same time students monitor vital signs and oxygen saturation. In addition, students monitor their mock patient's pulse ox. In preparation for their roles as physical	**Lab Assignment:** Vital signs and exercises Quiz

	assessment are presented. The effects of therapeutic exercise on the cardiovascular system are reviewed. Aerobic exercise is presented. Students are introduced to concepts of cardiac rehabilitation. The effect of types of exercise (isometric, isotonic, open and closed chain) on the cardiovascular system are explored.		therapy care educators, students practice teaching exercise activities. *Treatment Application Activity* Students exhibit critical thinking and sound technical skills in the management of a mock cardiovascular patient as presented by the instructor and implement the prescribed plan of care. Students perform measurement and assessment techniques, vital signs monitoring, range of motion and basic therapeutic exercise techniques appropriate to the scenario. While performing interventions, students consider additional factors influencing patient care. Following this treatment application activity students discuss patient management and therapeutic techniques.	
Week 3	**Shoulder Activities** Range of motion, goniometry, and anatomical considerations (previously learned in PTA 2) of the shoulder are reviewed. The student is provided with instruction of manual muscle testing techniques for the shoulder. Principles of active and resistive exercises for the shoulder are provided. Equipment used specifically for shoulder exercise is introduced.	Read: Kisner Chapter 17, Chapter 4 pp. 117-119 Chapter 6 pp. 212-214 Hislop, shoulder manual muscle tests Review Week 3 – lecture and lab	Students apply their knowledge of post-operative and non-operative orthopedic conditions to the shoulder joint and perform mock exercise interventions accordingly. Additionally, students begin an examination of central nervous system conditions and their effects on the shoulder. Students use specific patient scenarios to practice manual muscle testing and exercise techniques. Students assess patient response and endurance. In preparation for their roles as physical therapy care educators, students practice teaching these skills *Treatment Application Activities* Students exhibit critical thinking and sound technical skill in the management mock patient status post cerebral vascular accident as presented by the instructor and implement the prescribed plan of care. Students perform a mock patient intervention consisting of appropriate therapeutic exercise as well as bed mobility, transfer training, gait training activities (as previously learned in PTA 1 and PTA 3) appropriate to the scenario. Following this treatment application activity, students discuss patient management and therapeutic techniques.	**Lab Assignment:** Shoulder MMT and exercises Documentation Assignment – on Blackboard Quiz
Week 4	**Shoulder and Elbow Activities** Discussion of the shoulder continues. Range of motion, goniometry, and anatomical considerations (previously learned	Read: Kisner Chapter 18, Chapter 4 pp. 119-120 Chapter 6 pp. 214-	Students apply their knowledge of peripheral nervous system conditions and general deconditioning pathologies to the shoulder joint and perform appropriate exercise treatments. Given patient scenarios, students use therapeutic exercise equipment including: wall pulleys, Theraband, UBE, etc.	**Lab Assignment**: Shoulder and Elbow MMT and exercises Documentation Assignment –

	in PTA 2) of the elbow and forearm complex are reviewed. The student is provided with instruction of manual muscle testing techniques for the elbow and forearm complex. Therapeutic exercise of the elbow and forearm complex is introduced.	215 Hislop, elbow manual muscle tests Review Week 4 – lecture and lab	Students begin to practice manual muscle testing and therapeutic exercise of the elbow and forearm complex. Students assess patient response and endurance. In preparation for their roles as physical therapy care educators, students practice teaching these skills. *Treatment Application Activity* Students exhibit critical thinking and sound technical skill in the management of cervical radiculopathy as presented by the instructor and implement the prescribed plan of treatment. Students perform patient treatment activities, appropriate to this scenario, considering their knowledge of anatomy, pathology, and therapeutic exercise. Following this treatment application activity, students discuss patient management and therapeutic techniques.	SOAP note Quiz
Week 5	**Elbow and Wrist Activities** Range of motion, goniometry, and anatomical considerations (previously learned in PTA 2) of the wrist are reviewed. The student is provided with instruction of manual muscle testing techniques for the wrist. The student is introduced to therapeutic exercise of the wrist.	Read: Kisner Chapter 19, Chapter 4 pp. 120-121 Chapter 6 pp. 215-216 Hislop, wrist manual muscle tests Review Week 5 – lecture and lab	Students' knowledge of orthopedic, neurological and general deconditioning pathologies are applied to the elbow and forearm complex. Given patient scenarios, students perform therapeutic exercises. Students begin to practice manual muscle testing and therapeutic exercise of the wrist. Students assess patient response and endurance. In preparation for their roles as physical therapy care educators, students practice teaching these skills *Treatment Application Activity* Students exhibit critical thinking and sound technical skill in the management of a generally deconditioned patient with severe rheumatoid arthritis affecting the wrist as presented by the instructor and implement the prescribed plan of treatment. Students perform patient treatment activities considering their knowledge of anatomy, pathology, goniometry, thermal modalities and therapeutic exercise appropriate to the scenario. Following this treatment application activity, students discuss patient management and therapeutic techniques.	**Lab Assignment:** Elbow and Wrist MMT and exercise Documentation Assignment – on Blackboard SHOULDER COMPETENCY Quiz
Week 6	**Wrist and Hand Activities** Range of motion, goniometry, and anatomical considerations (previously learned in PTA 2) of the hand are reviewed. Manual	Read: Kisner Chapter 19, Chapter 4 pp. 120-121 Chapter 6 pp. 215-	Students' knowledge of orthopedic, neurological and general deconditioning pathologies is applied to the wrist and hand. Students practice manual muscle testing of the wrist and hand. Given patient scenarios, students perform therapeutic exercises. Students assess patient response and endurance. In preparation	**Lab Assignment**: Wrist and hand MMT and exercises Documentation Assignment – SOAP note

	muscle testing of the hand is presented. The student is introduced to therapeutic exercise of the hand.	216 Hislop, wrist manual muscle tests Review Week 6 – lecture and lab	for their roles as physical therapy care educators, students practice teaching these skills *Treatment Application Activity* Students exhibit critical thinking and sound technical skill in the management of a post upper extremity fracture case as presented by the instructor and implement the prescribed plan of treatment. Students perform patient treatment activities considering their knowledge of anatomy, pathology, goniometry, thermal modalities and therapeutic exercise appropriate to the scenario. Following this treatment application activity, students discuss patient management and therapeutic techniques.	Research Article Paper Due ELBOW COMPETENCY Quiz
Week 7 10/22 - 10/28	Midterm Examination	Review for Midterm Examination	Students are provided with multiple opportunities to apply upper extremity range of motion, manual muscle testing, and therapeutic exercise. Principles of endurance, treatment organization, program progression, effects of pain, and outcome assessments, are emphasized. Students give rationale for therapeutic exercise program selection including the use of exercise equipment and manual techniques. Construction of home exercise programs is practiced. Students continue to practice the communication of patient status to the supervising physical therapist.	**Lab Assignment**: MMT and Exercises of the UE WRIST COMPETENCY MIDTERM EXAM
Week 8	**Hip Activities** Range of motion, goniometry, and anatomical considerations of the hip are reviewed. Manual muscle testing of the hip is presented. The student is introduced to therapeutic exercise of the hip.	Read: Kisner Chapter 20, Chapter 4 pp. 121-124 Chapter 6 pp. 216-217 Hislop, hip manual muscle tests Review Week 8 – lecture and lab	Students' knowledge of orthopedic, neurological and general deconditioning pathologies is applied to the hip joint. Given patient scenarios, students perform therapeutic exercises. Students practice manual muscle testing and therapeutic exercise of the hip. Students practice both manual and mechanical therapeutic exercise of the hip. Students assess patient response and endurance. In preparation for their roles as physical therapy care educators, students practice teaching these skills *Treatment Application Activity* Students exhibit critical thinking and sound technical skill in the management of a patient with osteoarthritis of the hip as presented by the instructor and implement the prescribed plan of treatment. Students perform patient treatment activities considering their knowledge of anatomy, pathology,	**Lab assignment:** Hip MMT and exercise HEP #1 Quiz

			goniometry, thermal modalities, functional and transfer activities and therapeutic exercise appropriate to the scenario. Following this treatment application activity, students discuss patient management and therapeutic techniques.	
Week 9	**Hip and Knee Activities** Therapeutic exercise and the hip are explored further. Range of motion, goniometry, and anatomical considerations of the knee are reviewed. Manual muscle testing of the knee is presented. The student is introduced to therapeutic exercise of the knee.	Read Kisner Chapter 20 Review Week 9 lecture and lab	Students' knowledge of orthopedic, neurological and general deconditioning pathologies is applied to the knee joint. Given patient scenarios, students perform therapeutic exercises. Students begin to practice manual muscle testing and therapeutic exercise of the knee. Students practice both manual and mechanical therapeutic exercise of the hip. Students assess patient response and endurance. In preparation for their roles as physical therapy care educators, students practice teaching these skills. *Treatment Application Activity* Students exhibit critical thinking and sound technical skill in the management of a post-operative orthopedic case as presented by the instructor and implement the prescribed plan of treatment. Students perform patient treatment activities considering their knowledge of anatomy, pathology, goniometry, thermal modalities, functional and transfer activities and therapeutic exercise appropriate to the scenario. Following this treatment application activity, students discuss patient management and therapeutic techniques.	**Lab Assignment:** Hip and knee MMT and exercise Documentation Assignment: SOAP note Quiz
Week 10	**Knee Activities** Discussion of the knee continues. The student is provided with more in-depth information about therapeutic exercise in the management of common post-surgical and pathological conditions including generalized weakness, osteoarthritis, and ligament and cartilage damage.	Read: Kisner Chapter 21, Chapter 4 pp. 124-125 Chapter 6 pp. 218 Hislop, knee manual muscle tests Review Week 10 – lecture and lab	Students continue to practice manual muscle testing and therapeutic exercises of the knee. Students assess patient response and endurance. Given patient scenarios, students perform therapeutic exercises for the knee using therapeutic equipment. In addition, students are exposed to different types of knee braces used in a variety of pathological conditions. *Treatment Application Activity* Students exhibit critical thinking and sound technical skill in the management of a traumatic sports injury as presented by the instructor and implement the prescribed plan of	**Lab Assignment:** Knee MMT and exercises Documentation Assignment – on Blackboard HIP COMPETENCY Quiz

			treatment. Students perform patient treatment activities considering their knowledge of anatomy, pathology, goniometry, thermal modalities, functional and transfer activities and therapeutic exercise appropriate to the scenario. Following this treatment application activity, students discuss patient management and therapeutic techniques.	
Week 11	**Ankle Activities** Range of motion, goniometry, and anatomical considerations of the ankle and foot are reviewed. Manual muscle testing of the ankle and foot are presented. The student is introduced to therapeutic exercise of the ankle and foot.	Read: Kisner Chapter 22 Chapter 4 pp. 125-126 Chapter 6 pp. 218-219 Hislop, ankle manual muscle tests Review Week 5 – lecture and lab	Students' knowledge of orthopedic, neurological and general deconditioning pathologies is applied to the ankle and foot. Given patient scenarios, students perform therapeutic exercises. Students practice manual muscle testing and therapeutic exercise of the ankle and foot. Students assess patient response and endurance. In preparation for their roles as physical therapy care educators, students practice teaching these skills. *Treatment Application Activity* Students exhibit critical thinking and sound technical skill in the management of a generally debilitated patient in a spinal cord injury case as presented by the instructor and implement the prescribed plan of treatment. Students perform patient treatment activities considering their knowledge of anatomy, goniometry, pathology, functional and transfer activities and therapeutic exercise appropriate to the scenario. While performing treatments students consider additional factors influencing patient care and the contemporary practice of physical therapy including psychosocial issues and other issues impacting the health care delivery system. Following this treatment application activity, students discuss patient management and therapeutic techniques.	**Lab assignment** Ankle MMT and exercises KNEE COMPETENCY Quiz
Week 12	**Comprehensive Exercise Programs and Home Exercise Programs** Concepts of home exercise programs are further explored with emphasis placed on patient compliance, program revision, diversity of instruction and assessment of results. Concepts and practices of therapeutic	Kisner Chapter 23	Discussion of therapeutic principles continues. Students are provided with multiple opportunities to apply lower extremity range of motion, manual muscle testing, and therapeutic exercise. Principles of endurance, treatment organization, program progression, effects of pain, and outcome assessments, are emphasized. Students give rationale for therapeutic exercise program selection including the use of exercise equipment and manual techniques. Students continue to practice the communication of patient status to the supervising physical	**Lab Assignment** Advance therapeutic exercises HEP #2 Due ANKLE COMPETENCY Quiz

	exercise management are reviewed. Emphasis is placed on patient progression and response, appropriate goal setting and treatment diversity. Correlation of the achievement of exercise goals with changes in functional abilities is also reinforced.		therapist. *Treatment Application Activity* Students exhibit critical thinking and sound technical skill in the management of a patient status-post a cerebral vascular accident in a rehabilitation setting as presented by the instructor and implement the prescribed plan of treatment. Students perform patient treatment activities of the upper and lower extremity considering their knowledge of anatomy, pathology, goniometry, thermal modalities, functional and transfer activities and therapeutic exercise appropriate to the scenario. In addition, treatment includes the design and instruction of a home exercise program. Following this treatment application activity, students discuss patient management and therapeutic techniques.	Practical Exam
Final Exams	**Final Exam Week**	Review all materials	Final Exam	Date of final exam will be announced in December.