COURSE SYLLABUS
INTRODUCTION TO THERAPEUTIC EXERCISE THEORY
PTH 210A
2 credit hours / 2 contact hours

INSTRUCTOR: Eric Osman PT/ATC
College of Applied Science & Arts
Room 62 & 64
Phone: 618-614-8110
Email: eosman32@aol.com

OFFICE HOUR: Tuesday 2:00pm to 4:00pm (after lab session)

CLASS SCHEDULE:
Tuesday 8:00 am to 9:50 am

TEXTBOOKS:

Required:


COURSE CATALOG DESCRIPTION:

PTH 210A – Introduction to Therapeutic Exercise Theory: This course is an introduction to therapeutic exercise theory. Students will apply basic neuroanatomy and theoretical concepts related to therapeutic exercise and identify treatment interventions and special tests associated with specific orthopedic conditions. Co-requisite: PTH 210B. Prerequisite: PTH 207 with a minimum grade of C. Restricted to major.
COURSE OBJECTIVES:

Upon successful completion of this course, the student shall be able to:

1. Understand the scientific principles related to therapeutic exercise as measured by performance on written exams.

2. Identify common orthopedic conditions related to the upper extremity and apply appropriate treatment interventions as measured by performance on written exams.

3. Identify common orthopedic conditions related to the lower extremity and apply appropriate treatment interventions as measured by performance on written exams.

4. Identify special tests commonly utilized in physical therapy examinations as measured by performance on written exams.

5. Understand the normal gait pattern and recognize common gait deviations as measured by performance on written exams.

6. Understand body mechanics, common postural abnormalities and associated structural and soft tissue adaptations as measured by performance on written exams.

7. Distinguish between structural and nonstructural scoliosis as measured by performance on written exams.

8. Identify common orthopedic conditions related to the cervical and lumbar spine and apply appropriate treatment interventions as measured by performance on written exams.

OUTLINE OF TOPICS OF LECTURE:

<table>
<thead>
<tr>
<th>Topics</th>
<th>Percentages</th>
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<tbody>
<tr>
<td>I. Principles of Stretching and ROM</td>
<td>10.0%</td>
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<tr>
<td>II. Principles of Muscle Performance</td>
<td>12.5%</td>
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<tr>
<td>III. Upper Extremity Dysfunctions and Treatment</td>
<td>25.0%</td>
</tr>
<tr>
<td>IV. Lower Extremity Dysfunctions and Treatment</td>
<td>25.0%</td>
</tr>
<tr>
<td>V. Gait</td>
<td>12.5%</td>
</tr>
<tr>
<td>VI. Posture &amp; Scoliosis</td>
<td>5.0%</td>
</tr>
<tr>
<td>VII. Cervical &amp; Lumbar Spine</td>
<td>10.0%</td>
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SCHEDULE OF WHEN TOPICS ARE TAUGHT:

Topic 1 (8/23)

Lecture – Introduction to course syllabus; physiology and principles of ROM and stretching. Kisner 1, 3, and 4

Topic 2 (8/30)

Lecture – Physiology and types of muscle contraction; muscle performance related to endurance, power and strength. Kisner 6 and 7

Topic 3 (9/6)

Lecture – Shoulder anatomy, arthrokinematics, scapulohumeral rhythm, force couple relationships, peripheral nerve sensation and dermatomes, shoulder dysfunctions and treatment interventions. Kisner 17, Konin 3

Topic 4 (9/13)

Lecture – Shoulder anatomy, arthrokinematics, scapulohumeral rhythm, force couple relationships, peripheral nerve sensation and dermatomes, shoulder dysfunctions and treatment interventions.

Topic 5 (9/20)

Lecture – Elbow and forearm anatomy, arthrokinematics, peripheral nerve sensation and dermatomes, elbow dysfunctions and treatment interventions. Kisner 18, Konin 4

Test # 1 (9/27)

Written test and practical exam
Topic 6 (10/4)

**Lecture** – Wrist and hand anatomy, arthrokinematics, peripheral nerve sensation and dermatomes, wrist and hand dysfunctions and treatment interventions. Kisner 19, Konin 5

OCTOBER 11th FALL BREAK – NO CLASS

Topic 7 (10/18)

**Lecture** – Wrist and hand anatomy, arthrokinematics, peripheral nerve sensation and dermatomes, wrist and hand dysfunctions and treatment interventions.

Topic 8 (10/25)

**Lecture** – Hip joint and pelvic anatomy, arthrokinematics, peripheral nerve sensation and dermatomes, hip dysfunctions and treatment interventions. Kisner 20, Konin 9

Topic 9 (11/1)

**Lecture** – Knee anatomy, arthrokinematics, peripheral nerve sensation and dermatomes, knee dysfunctions and treatment interventions. Kisner 21, Konin 10

Test # 2 (11/8)

**Written test and practical exam**

Topic 10 (11/15)

**Lecture** – Foot and ankle anatomy, arthrokinematics, peripheral nerve sensation and dermatomes, ankle and foot dysfunctions and treatment interventions. Kisner 22, Konin 11.

Topic 11 (11/22)

**Lecture** – Gait: Stance and swing phase, determinants of gait, biomechanics, and muscle function. Kisner 22.
Topic 12 (11/29)

**Lecture** – Posture/scoliosis and lumbar spine: Common postural abnormalities, structural versus nonstructural scoliosis, body mechanics; lumbar anatomy, common dysfunctions and treatment interventions. Kisner 14,15 and Konin 2,7

_topic_13 (12/6)

**Lecture** – Lumbar and cervical anatomy; common dysfunctions and treatment interventions

Test # 3 (Final 12/13)

**Written test**

**DESCRIPTION OF TEACHING METHODS AND LEARNING EXPERIENCES**

The lecture and written test component of the course is designed to increase the student’s cognitive domain of learning (knowledge base) by providing a didactic teaching experience. PowerPoint presentations will be complimented with examples that are clinically based. Students are encouraged to participate in the lecture component by asking questions and relating their own experiences to the topics discussed.

**STUDENT EVALUATION:**

**Grading Policy:**

All students in the physical therapist assistant program will be graded in a standard procedure for all written tests and practical examinations.

**Grading Scale:**

A percentage scale utilized for all written exams is based on the minimal test score that is required to pass the licensure examination.

- 270-300 points = A  (90% & above )
- 240-269 points = B  (80 - 89%)
- 210-239 points = C  (70 - 79%)
- 180 -209 points = D  (60- 69%)
- Less than 179 points = E
<table>
<thead>
<tr>
<th>Points</th>
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<tbody>
<tr>
<td>3 Written tests</td>
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<tr>
<td>300</td>
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<tr>
<td><strong>Total Points</strong></td>
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<td><strong>300</strong></td>
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**NOTE:** A grade of C or above is required for the Physical Therapist Assistant Program. Sample test questions with answers will be provided on Desire-To-Learn.

Class attendance and participation will not be calculated into the course grade as a percentage score. However, it is the expectation of the program faculty that all PTA students demonstrate a professional interest in the material, attend all classes and actively participate. Utilization of cell phones, other than recording lectures or videoing labs, will not be tolerated during class time. It is expected that phones will be shut off during class.

**Electronic Devices-** The use of electronic devices, such as cell phones, will not be permitted in the classroom. All electronic devices should be TURNED OFF when entering the classroom. In the case of an emergency, persons may call the School of Allied Health office at (618) 453-7211 and a message will be delivered to the classroom.

**Supplementary Assistance** – With the cooperation of SIU’s Disability Support Services (DSS), each student who qualifies for reasonable supplementary assistance has the right to receive it. Students requesting supplementary assistance must first register with DSS, (453-5738) or [http://disabilityservices.siu.edu/](http://disabilityservices.siu.edu/).

Notice: If you have any type of special need(s) or disability for which you require accommodations to promote your learning in this class, please contact the instructor as soon as possible. The Office of Disability Support Services (DSS) offers various support services and can help you with special accommodations.