

LAST REVIEW: 2010-2011 **NEXT REVIEW:** 2015-2016 **STATUS:** A

COURSE TITLE: Anatomy for the PT Assistant

COMMON COURSE NUMBER: PHT 1103

CREDIT HOURS: 3

CONTACT HOUR BREAKDOWN

CLOCK HOURS:

Lecture: 48

Lab:

Clinic:

Other:

PREREQUISITE(S): BSC 1086 and BSC 1086L

COREQUISITE(S): PHT 1103L

PRE/COREQUISITE(S):

COURSE DESCRIPTION):

Course introduces basic human anatomy with an emphasis on the structure and function of the skeletal and muscular systems. Actions, origins, insertions and innervations of muscles are discussed. Surface anatomy is presented with an introduction to basic palpation.

UNIT TITLES

- 1.0 Overview
- 2.0 Head, Neck and Face
- 3.0 Spine and Thorax
- 4.0 Shoulder and Arm
- 5.0 Forearm and Hand
- 6.0 Pelvis and Thigh
- 7.0 Leg and Foot

ASSESSMENT:

Please provide a brief description (250 characters maximum) that details how students will be assessed on the course outcomes.

- 1. Announced and unannounced quizzes and Unit examinations:**
- 2. Mid term and/or Final Exam (cumulative/comprehensive);**
- 3. Assessment of reading and online assignments via submission of homework projects;**
- 4. Participation in Discussion Forums on the e-learning site**
- 5. Completion of projects (group or individual) as assigned**

Common Course Number: PHT 1103**UNITS****Unit 1 Overview****General Outcome:**

- 1.0 The student will be able to provide an overview of anatomic terminology including the planes and axes of motion, the basic histology of bone and relate its characteristics, the major joint classifications with examples, the basic histology of skeletal muscle and relates its characteristics and the basic function of the central and peripheral nervous systems as related to the innervation of skeletal muscles.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 1.1 List the synonyms for general body regions.
- 1.2 Name the synonyms for body surfaces.
- 1.3 Label the planes of the body.
- 1.4 Define the various movements that occur within the body
- 1.5 Identify the axes of joint motion.
- 1.6 List the functions of the skeletal system.
- 1.7 Detail the various types of connective tissue with characteristics of each.
- 1.8 Discuss the composition of bone.
- 1.9 List the types of bone with identifying characteristics of each.
- 1.10 Define diaphysis, epiphysis, metaphysis and periosteum.
- 1.11 Label an anterior, posterior and lateral diagram of a human skeleton.
- 1.12 Define arthrology.
- 1.13 Discuss the classifications of joints from immovable to freely movable.
- 1.14 Identify example of fibrous, cartilage, and synovial joints.
- 1.15 List and describe the three main types of cartilage.
- 1.16 Describe degrees of freedom.
- 1.17 Identify histologic aspects of muscle tissue.
- 1.18 Discuss the physiology of muscle contraction.
- 1.19 Explain the function of the muscle spindle.
- 1.20 Define origin and insertion and their significance in muscle contractions.
- 1.21 Define basic structure of the central and the peripheral nervous systems as their function relates to human movement.
- 1.22 Review the components of the brachial plexus and the lumbosacral plexus.

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Unit 2 Head, Neck and Face

General Outcome:

- 2.0 The student will be able to identify major bones, joints, muscles, actions and innervations of the head, neck and face.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 2.1 Identify and list the importance of the landmarks of the head, neck and face.
- 2.2 Identify the movements of the head, neck and face.
- 2.3 Identify and list the bony landmarks of the head, neck and face.
- 2.4 Describe the articulations found within the head, neck and face.
- 2.5 Relate the muscular movements of the head, neck and face to function.
- 2.6 Identify prime movers of the head, neck and face as well as the antagonists and synergists.
- 2.7 Identify the origins, insertions and actions of listed muscles that are responsible for movement of the head, neck and face.
- 2.8 Identify the innervations of listed muscles that are responsible for movement of the head, neck and face.
- 2.9 Identify the ligamentous structures of the head, neck and face.

Common Course Number: PHT 1103

Unit 3 Spine and Thorax

General Outcome:

- 3.0 The student will be able to identify major bones, joints, muscles, actions and innervations of the spine and thorax.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 3.1 Identify and list the importance of the landmarks of the spine and thorax.
- 3.2 Identify the movements of the spine and thorax.
- 3.3 Identify and list the bony landmarks of the spine and thorax.
- 3.4 Describe the articulations found within the spine and thorax.
- 3.5 Relate the muscular movements of the spine and thorax to function.
- 3.6 Identify prime movers of the spine and thorax as well as the antagonists and synergists.
- 3.7 Identify the origins, insertions and actions of listed muscles that are responsible for movement of the spine and thorax.
- 3.8 Identify the innervations of listed muscles that are responsible for movement of the spine and thorax.
- 3.9 Identify the ligamentous structures of the spine and thorax.

Common Course Number: PHT 1103

Unit 4 Shoulder and Arm

General Outcome:

- 4.0 The student will be able to identify major bones, joints, muscles, actions and innervations of the shoulder and arm.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 4.1 Identify and list the importance of the landmarks of the shoulder complex.
4.2 Identify the movements of the shoulder and arm.
4.3 Identify and list the bony landmarks of the scapula, humerus, and related bones.
4.4 Describe the articulations found within the shoulder complex.
4.5 Relate the muscular movements of the shoulder and arm to function.
4.6 Identify prime movers of the shoulder and arm as well as the antagonists and synergists.
4.7 Identify the origins, insertions and actions of listed muscles that are responsible for movement of the shoulder and arm.
4.8 Identify the innervations of listed muscles that are responsible for movement of the shoulder and arm.
4.9 Identify the ligamentous structures of the shoulder and arm.
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Common Course Number: PHT 1103

Unit 5 Forearm and Hand

General Outcome:

- 5.0 The student will be able to identify major bones, joints, muscles, actions and innervations of the forearm and hand.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 5.1 Identify and list the importance of the landmarks of the forearm and hand.
5.2 Identify the movements of the forearm and hand.
5.3 Identify and list the bony landmarks of the forearm and hand.
5.4 Describe the articulations found within the forearm and hand.
5.5 Relate the muscular movements of the forearm and hand to function.
5.6 Identify prime movers of the forearm and hand as well as the antagonists and synergists.
5.7 Identify the origins, insertions and actions of listed muscles that are responsible for movement of the forearm and hand.
5.8 Identify the innervations of listed muscles that are responsible for movement of the forearm and hand.
5.9 Identify the ligamentous structures of the forearm and hand.

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Unit 6 Pelvis and Thigh

General Outcome:

- 6.0 The student will be able to identify major bones, joints, muscles, actions and innervations of the pelvis and thigh.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 6.1 Identify and list the importance of the landmarks of the pelvis and thigh.
- 6.2 Identify the movements of the pelvis and thigh.
- 6.3 Identify and list the bony landmarks of the pelvis and thigh.
- 6.4 Describe the articulations found within the pelvis and thigh.
- 6.5 Relate the muscular movements of the pelvis and thigh to function.
- 6.6 Identify prime movers of the pelvis and thigh as well as the antagonists and synergists.
- 6.7 Identify the origins, insertions and actions of listed muscles that are responsible for movement of the pelvis and thigh.
- 6.8 Identify the innervations of listed muscles that are responsible for movement of the pelvis and thigh.
- 6.9 Identify the ligamentous structures of the pelvis and thigh.

Common Course Number: PHT 1103

Unit 7 Leg and Foot

General Outcome:

- 7.0 The student will be able to identify major bones, joints, muscles, actions and innervations of the leg and foot.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 7.1 Identify and list the importance of the landmarks of the leg and foot.
7.2 Identify the movements of the leg and foot.
7.3 Identify and list the bony landmarks of the leg and foot.
7.4 Describe the articulations found within the leg and foot.
7.5 Relate the muscular movements of the leg and foot to function.
7.6 Identify prime movers of the leg and foot as well as the antagonists and synergists.
7.7 Identify the origins, insertions and actions of listed muscles that are responsible for movement of the leg and foot.
7.8 Identify the innervations of listed muscles that are responsible for movement of the leg and foot.
7.9 Identify the ligamentous structures of the leg and foot. .

Common Course Number: PHT 1103

Unit 8

General Outcome:

8.0 The student will be able to identify major joints, bones, muscles actions and innervations of the lower extremity.

Specific Instructional Objectives:

Upon successful completion of this unit, the student will be able to:

- 8.1 Identify the movements of the lower extremity.
- 8.2 Identify the components of the bony pelvis.
- 8.3 Identify the bony landmarks of the femur.
- 8.4 Identify the bony landmarks of the tibia and the fibula.
- 8.5 Identify the bony landmarks of the foot and ankle.
- 8.6 Identify the main muscles of the lower extremity.
- 8.7 Describe the articulations found within the lower extremity.
- 8.8 Discuss the significance of the joints of the lower extremity.
- 8.9 List and describe the various support structures of the lower extremity: ligaments, joint structures and tendons.
- 8.10 Relate the muscular movements of the lower extremity to function.
- 8.11 Identify prime movers of the lower extremity.
- 8.12 Identify the origins, insertions and actions of listed muscles that are responsible for movement of the lower extremity.
- 8.11 Identify the innervations of listed muscles that are responsible for movement of the lower extremity.