

**KING SAUD UNIVERSITY**

**COLLEGE OF APPLIED MEDICAL SCIENCES**

**REHABILITATION SCIENCES DEPARTMENT / PHYSICAL THERAPY**

**COURSE SYLLABUS  
1<sup>ST</sup> SEMESTER 2011/2012**

**Course Title: Anatomy**

**Course Number: RHS 241**

**Credit Hours: 2 Theory + 1 Practical = 3 hours**

**Course Instructor: Mrs.: Asma A. Alderaa**

**Course Description:** This course is an overview of human anatomy (i.e., body structure and function), given in preparation for later courses that cover anatomical regions in greater depth. Special emphasis will be given on the musculoskeletal system.

**Course Objectives:** Upon completion of this course, students should be able to have a basic understanding of the macroscopic (gross) structure of the human body.

**Teaching Philosophy:** I will teach you Functional Morphology; i.e., how the body works, and **not** just what the parts are called. I encourage my students to become self-directed learners in Anatomy so that they can continue to expand their understanding of the human body throughout their professional careers.

**Teaching Methods:**

1. Theoretical lectures
2. Audiovisual anatomical illustrations
3. Practical sessions using illustrative plastic models
4. Using clinical scenarios to link anatomical structures to common pathology and injuries of the human body

## Course Outline

### **Week 1 (September 13)**

General Introduction to Anatomy:

- Introduction to terminology
- Reference / anatomical position
- Anatomical directional terminology
- Planes of the body
- Terms of movement
- Introduction to the skeleton and joints

### **Week 2 (September 20)**

The Lower Limb I:

- General survey of the lower limb
- The bony pelvis
- The femur and hip joint
- Ligaments of the hip joint
- Muscles of the gluteal region
- Lumbar plexus
- Sacral plexus
- Sciatic nerve
- Structure of spinal nerves
- Movement of the bony pelvis
- Movements at the hip joint

### **Week 3 (September 27)**

The Lower Limb II:

- The thigh & knee
- Anterior compartment of the thigh
- Posterior compartment of the thigh
- Medial compartment of the thigh
- Femoral & obturator nerves
- Movements at the knee joint
- Ligaments of the knee joint
- Skeleton of the leg

### **Week 4 (October 4)**

**(Tue Oct 4: 1<sup>st</sup> Quiz)**

The Lower Limb III:

- Skeleton of the foot
- Crural fascia
- Anterior compartment of the leg
- Posterior compartment of the leg
- Lateral compartment of the leg
- Tibial nerve
- Common peroneal nerve

**Week 5 (October 11)**

The Lower Limb IV:

- The foot
- The ankle joint
- Ligament injuries
- Arches of the foot
- Movements of the foot
- Analyses of activities of the lower limb

**Week 6 (October 18)**

**(Tue, Oct 18: 1<sup>st</sup> Midterm exam)**

The Lower Limb V:

- Intrinsic muscles of the foot
- Plantar muscles
- Dorsum of the foot
- Movement of the toes
- Vulnerable nerves of the lower limb

**Week 7 (November 25)**

The Trunk:

- Vertebrae: discs, stability and movement
- Ligaments, discs and articulations
- Muscles of the back
- Movement of the back
- Spinal cord

**Week 8 & 9 (November 1-9)**

**(Hajj Holiday, Nov.1<sup>st</sup> - 9<sup>th</sup>)**

**Week 10 (November 15)**

**(Tue, Nov 15: 2<sup>nd</sup> Quiz)**

The Upper Limb I:

- General survey of the upper limb
- Movements of the scapula and arm
- Bones and joints of the shoulder
- Movements of the shoulder
- Bursae and shoulder lesions

**Week 11 (November 22)**

The Upper Limb II:

- Brachial plexus
- Nerve injuries
- Muscles of the pectoral region
- Muscles of the shoulder proper
- Rotator cuff

**Week 12 (November 29)**

**(Tue, Nov 29: 2<sup>nd</sup> Midterm exam)**

The Upper Limb III:

- The arm
- Movements at the elbow joint
- Muscles of the arm
- Movements at the radioulnar joints
- Movements at the wrist

### **Week 13 (December 6)**

The Upper Limb IV:

- Scapulohumeral rhythm
- Movement of the shoulder
- Impingement syndromes
- Elbow joint
- Radioulnar joints
- Muscles of the forearm

### **Week 14 (December 13)      (Tue, Dec 13: 3<sup>rd</sup> Quiz)**

The Upper Limb V:

- The hand
- The palmar fascia
- The flexor tendon sheaths
- Fascial spaces of the palm
- Dorsum of the hand

### **Week 15 (December 20)**

The Thorax:

- Thoracic wall
- Pleura and pericardial sac
- Thoracic viscera
- Mediastinum and heart
- Superior and posterior mediastinum
- Muscles of respiration

The Abdomen and Pelvis:

- Muscles of the abdominal wall
- Abdominal viscera
- Posterior abdominal wall
- Pelvic floor

### **Week 16 (December 27)**

The Head and Neck:

- Skull and intracranial region
- Meninges and brain
- Facial muscles
- Muscles of mastication
- The temporomandibular joint
- Muscles of the tongue and floor of the mouth
- Muscles of the neck

**Week 17 (January 3)**  
Final lab examination

**Methods of evaluation:**

2 Midterm exams	2 X 15% = 30%
2 Quizzes	2 X 5 % = 10%
Poster	10%
Practical exam	10%
1 Final exam	40%

**References:**

The following are suggested references. You definitely need a text book AND an atlas.

1. Jenkins DB. **Hollinshead's Functional Anatomy of the Limbs and Back**, 7<sup>th</sup> ed. WB Saunders Company; 1998.
2. Agur AMR & Dalley A. Grant's Atlas of Anatomy, 11<sup>th</sup> ed. Lippincott Williams & Wilkins; 2005.
3. Moore KL & Dalley AF. **Clinically Oriented Anatomy**, 4<sup>th</sup> ed. Lippincott Williams & Wilkins; 1999.
4. Snell RS. Clinical Anatomy for Medical Students, 6<sup>th</sup> ed. Lippincott Williams & Wilkins; 2000.
5. Calais-Germain B. Anatomy of Movement. Eastland Press Incorporated; 1993.
6. Marieb EN & Mallatt J. Human Anatomy. Benjamin Cummings; 2001.