RHS 341
Therapeutic Exercises & Human Anatomy

Course Instructors:

Ali H Alnahdi, PT, PhD	Ali Z Aldali, PT, MSc
Office number: 2059	2066
Phone number: 4693595	0114693601
E-mail: alialnahdi@ksu.edu.sa	aldali@ksu.edu.sa

Practical Sessions: **Monday, 1:00pm to 5:00pm (Electro Lab)**

Availability in office:

Sunday & Monday (from 08.00 am –11.30 am)
Tuesday & Thursday (from 08.30 am –11.30 am)

Course Description:

This course will begin with the concepts of kinematics and kinetics, muscle structure and function, and joint structure and function. Joints of the upper and lower extremities and the spine will be studied in details including osteology, Arthrology and muscle and joint interactions. For each joint Osteokinematics and Arthrokinematics will be discussed including the clinical applications of these concepts.

Objective:

By the end of the course, students are expected to:

1- Understand the concept of kinematics (Osteokinematics and Arthrokinematics) and kinetics
2- Be familiar with skeletal muscle structure, muscle contraction mechanism, factors influencing muscle excursion and muscle force generation.
3- Recognize structures that constitute synovial joints and the function of each structure
4- Be familiar with the structure of the Joints of the upper and lower extremities and the spine
5- Understand Osteokinematics and Arthrokinematics of the Joints of the upper and lower extremities and the spine
6- Be familiar with different measurement methods to measure joint motion.
7- Be able to measure and document Joint range of motion of the upper limb, lower limb, cervical and lumbar spine.

Week	Topic	Book chapter
Week 1	Introduction	
Week 2	Kinematics and Kinetics	Chapter 1
Week 3	Joint structure and function	Chapter 2
Week 4	Muscle structure and function	Chapter 3
Week 5	Hip Joint	Chapter 12
Week 6	Knee Joint	Chapter 13
Week 7	Ankle and Foot	Chapter 14
Week 8	Ankle and Foot	Chapter 14
Week 9	Lumbar Spine and SI Joint	Chapter 9
Week 10	Midterm exam	
Week 11	Cervical Spine	Chapter 9
Week 12	Shoulder Complex	Chapter 5
Week 13	Elbow and Forearm	Chapter 6
Week 14	Wrist Joint	Chapter 7
Week 15	Hand	Chapter 8

Grades:
Written midterm Exam: 30
Practical exams: 30

Final written exam: 40

Note:

This course has mandatory practical component that require students to practice on each other examination and intervention procedures in order to learn important clinical physical therapy skills. During the practical sessions, students are expected to expose different body parts that are necessary for leaning different clinical skills including but not limited to palpation.

Required textbook:
Kinesiology of the Musculoskeletal System: Foundations for Rehabilitation.
2nd edition
Authors: Donald Neumann

Measurement of Joint Motion: A Guide to Goniometry. 4th edition
Authors: Norkin CC and White DJ

Last day to add classes: **Saturday 10/06/1442A.H – 23/01/2021G**
Last day to withdraw from classes and Academic semester:
Thursday 24/08/1442A.H – 06/04/2021G

Open related link: https://dar.ksu.edu.sa/ar/current

Second Semester 1442A.H

Topic	Day	Hijri date	Gregorian date
Beginning of the first semester	Sunday	7 / 5/ 1442 هـ	17 / 1 / 2021 م
The last date to drop the semester or a course	Thursday	24 / 8/ 1442 هـ	6 / 4 / 2021 م
Beginning of general Courses Exam	Saturday	12 / 9/ 1442 هـ	24 / 4 / 2021 م
Final exams start	Sunday	11 /10/ 1442 هـ	23 / 5 / 2021 م
End of final exams	Thursday	22 /10/ 1442 هـ	3 / 6 / 2021 م
Start of Faculty vacation	Wednesday	28 /10/ 1442 هـ	9 / 6 / 2021 م
Beginning of the first semester 1443	Sunday	21 / 1 / 1443 هـ	29/ 8 / 2021 م