



COURSE PLAN

FIRST: BASIC INFORMATION

College

College : Medicine
 Department : Internal medicine

Course

Course Title : Introduction to Clinical
 Medicine and Medical Ethics
 Course Code : 31500401
 Credit Hours : 8 hours/ 8 weeks
 Year level : 4th year

Instructor

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Class Times

Building	Day	Start Time	End Time	Room No.
Faculty of medicine	Sunday- Tuesday	1 pm	3 pm	B1 auditorium

Text Book

1. **Macleod's Clinical Examination, 12th Edition With STUDENT CONSULT Access.** By Graham Douglas, BSc(Hons), MB, ChB, FRCPE, Fiona Nicol, BSc(Hons), MB, BS, FRCGP, FRCPE and Colin Robertson, BA(Hons), MB, ChB, FRCPE, FRCS(
2. Browse's Introduction to the Symptoms & Signs of Surgical Disease

SECOND: PROFESSIONAL INFORMATION

COURSE DESCRIPTION

This course covers communication skills with patients and their relatives and the skills of history taking and physical examination of different body systems and the study of signs and symptoms of the diseases that affect the body through clinical training, lectures and seminars over an eight-week period. The course also covers the topics of medical informatics and medical ethics through lectures, seminars and practical training.



The first two weeks is designated as the general week

During the first 2 weeks the students are given a series of lectures covering the general history and examination, specific areas and systems of the body, general topics regarding the professionalism, communication skills and relevant ethical issues.

In addition of these lectures, the students are given two lectures about medical ethics contain the following objectives :

1. Introduction to Ethics in Medicine
2. Types of Ethics, The principles In Medical Ethics
3. DUTIES OF MEDICAL PRACTITIONERS
4. Medical Law & Ethics
5. medical liability law

The following six weeks

Students are divided into three major groups and each major group is divided into sub-groups, each major group spends two weeks in Internal Medicine, two weeks in general surgery, one week in Pediatrics and one week in neuromuscular department.

During these six weeks the students will start getting exposure to real patients and start applying the knowledge they gained in the first 2 weeks.

Students will work in pairs and start taking history and physical examinations from real patients then each sub-group gathers together, and an attending staff joins for further discussion regarding the cases.

Students have exposure to many subspecialties and many clinical scenarios, and each student is given the chance to discuss the case with the teaching staff and raise any questions.

Mini-OSCE Examination at the end of the last week.

1- General Surgery Clinical and Communication Skills Course Duration: 2 weeks

The general surgery weeks is divided into four subjects.

1. Abdomen
2. Head & Neck
3. Peripheral Vascular
4. Genitourinary



Students apply the knowledge and skills given in the 1st two weeks on real patients. Time is divided into 3 blocks

1 Hour: for the student to take history and physical examination.

2 Hours: The assigned teaching staff discusses the History and physical examination with the students and applies bed-side teaching.

1 Hour: The teaching staff discusses in a seminar like setting (small group discussion) the assigned subject for that day.

2- Internal Medicine Clinical and Communication Skills Course **Duration : 2 weeks**

The detailed description of activities during the two weeks period in the internal medicine department

History taking

1. Obtain a detailed history of the pertinent and necessary information regarding the patient presentation
2. Provide an accurate description of the relevant symptoms and events in the presenting illness and relate symptoms of other systems to the patient presentation
3. Interpret the information obtained in terms of a disorder of the function and structure and then in terms of pathology.
4. Present the patient's history and generate a problem list or differential diagnosis
5. Summarize the history emphasizing the most relevant points

Proper history taking is the key to solve most medical problems seen in clinical practice, and the only way to master this skill is by following certain guidelines together with seeing as many patients as possible. The student should observe the following principles whenever he is taking history from patients:

I. General guidelines

1. Introduce yourself to the patient
2. Be friendly
3. Start by talking about impersonal matters
4. Do not give impression of hurriedness
5. Address the patient by his/her name
6. Put the patient at ease



7. Give the patient chance to express himself
8. Be ready to interrupt the patient whenever desirable but in a tactful manner
9. Be careful about medical terms used by patients
10. Patients may exaggerate, suppress, or fake symptoms according to their personality
11. Questions should be clear and simple
12. Avoid leading questions or suggesting symptoms or answers to patients
13. Analyze symptoms thoroughly and in chronological order
14. Write notes while the patient is talking
15. If the patient is too sick give him a rest and complete later
16. In certain diseases history from eyewitness or family member is very important

II. Contents of the history

Complete history should cover the following aspects:

1. Patient profile
Including: name, age, sex, marital status, occupation, address, date of admission, and date of history taking
2. Chief complaint
Which means the problem which brought the patient to the clinic/ hospital. Most patients has one chief complaint but occasionally more than one. The chief complaint must be in the patient's own words and duration must be specified
3. History of present illness
In this part of the history a thorough analysis of the chief complaint is done as well as associated symptoms in a chronological order. For each symptom the following points must be clarified if applicable: onset, duration, site, severity, radiation, aggravating and relieving factors. Significant negatives must be mentioned.
4. Review of systems
Here the student must ask about the presence or absence of cardinal symptoms in all other systems which are probably not related to the present illness. Always start by mentioning the positives first
5. Past medical history
The student must enquire about:
 - A. Childhood illnesses and immunization
 - B. Operations and injuries
 - C. Previous hospitalization
 - D. Allergies including drug and food
 - E. Blood transfusion
 - F. Travel abroad
 - G. Common medical problems such as diabetes mellitus and hypertension
6. Drug history:
Including name, dose, and duration of usage
7. Family history including:
 - A. First degree relatives (father, mother, siblings, children)
 - B. Second degree relatives (aunts, uncles, cousins)
 - C. History of diabetes mellitus, hypertension, ischemic heart disease, kidney diseases, cancers etc.



- D. Family pedigree

- 8. Social history
 - A. Housing
 - B. Income
 - C. Occupation
 - D. Personal interests, hobbies, and animal contact
 - E. Smoking
 - F. Alcohol

- 9. Psychological history
 - A. Personality
 - B. Emotional reactions
 - C. Traumatic events (bereavement and separation)
 - D. Anxieties regarding financial, occupational, sexual, or religious matters

General examination

1. Detect signs of underlying disease reflected on the general appearance of the patient and exposed parts of his body including: hands, face, skin, skin appendages, and legs
2. Understand the pathophysiology of common abnormal findings seen in general examination such as pallor, jaundice, and cyanosis

Whenever the student is doing physical examination for any patient, he should observe the following:

1. Greet the patient, introduce yourself, and take permission from the patient
2. Stand on the right side of the patient
3. Patient must be properly undressed, gowned, and positioned according to the part to be examined
4. Patient privacy must be respected
5. Inform and explain to the patient each step in your examination
6. Avoid exhaustion of the patient
7. Make sure a female nurse is present whenever you are examining a female patient
8. You see only what you look for and you recognize what you know

General examination should include assessment of the following parameters

1. Assess state of awareness and level of consciousness (orientation and Glasgow coma scale)
2. Assess apparent state of health
 - a. acutely or chronically ill
 - b. frail
3. Identify signs of distress
 - a. pain



- b. anxiety
- c. cardio-pulmonary distress
4. Detect abnormal movements, tremors, tics etc.
5. Describe abnormal sounds, stridor, wheeze
6. Describe color and complexion
 - a. pale
 - b. cyanosed
 - c. plethoric
 - d. uremic
7. Assess weight and body built
 - a. obese
 - b. underweight
 - c. emaciated
 - d. short
 - e. giant or acromegalic
8. Describe posture and position of the patient, sitting, leaning forward, standing, or hiding from light
9. Assess state of skin, mucus membranes, and skin appendages (nails and hair)
10. Comment on dress and personal hygiene
11. Identify abnormal odors of body and breath, acetone, uremia, liver failure, halitosis, smoking, and alcohol
12. Examine the hands looking for
 - a. deformities
 - b. clubbing
 - c. temperature
 - d. sweating
 - e. joints and muscles
13. Assess state of hydration
14. Examine lower limbs for edema (pitting and non-pitting edema) and abnormalities in the feet
15. Assess vital signs
 - a. pulse
 - b. temperature
 - c. blood pressure
 - d. respiratory rate

Examination of the Cardiovascular system

1. Take history from a patient or simulated patient with a common cardiovascular problem such as chest pain, dyspnea, or palpitation
2. Observe for signs of cardiovascular disease by general inspection of the patient such as position of the patient, tachypnea, cyanosis, pallor, body built, and diaphoresis
3. Examine the hands for signs of cardiovascular disease such as clubbing, splinter hemorrhages, Osler's nodules, Janeway macules, palmar erythema, nicotine staining, and tendon xanthomas
4. Assess arterial pulse commenting on rate, rhythm, volume, character, state of artery wall, and radio femoral delay
5. Examine face looking for malar flush, xanthelasma, and corneal arcus
6. Measure jugular venous pressure and identify differences between arterial and venous pulsations in the neck
7. Inspect the precordium and anterior chest wall for deformities, scars, dilated veins, pulsations, and gynecomastia
8. Identify apex beat and comment on location and character
9. Palpate precordium for thrills, left parasternal heave or lift, and palpable sounds



10. Identify important areas for auscultation in the precordium including apical, tricuspid, pulmonary, aortic, and second aortic area
11. Listen for first and second heart sounds using the stethoscope and know how they are produced and how to differentiate between them
12. Identify the timing, character, mechanism of production, and how to listen for third and fourth heart sounds
13. Understand how to listen, time, describe, and grade murmurs
14. Understand the mechanism of production, how and where to listen for pericardial rub
15. Look for other signs of congestive heart failure such as basal lung crepitations, hepatomegaly, sacral and lower limb pitting edema

Examination of the respiratory system

1. Take history from a patient or simulated patient with a common respiratory problem such as shortness of breath, cough, or hemoptysis
2. Examine the upper respiratory tract looking for:
 - i. Nasal discharge and redness
 - ii. Patency of each nostril
 - iii. Tenderness over paranasal sinuses
 - iv. Tonsils and pharynx
3. Examine the chest from the **front** in the following sequence:

A. Inspection:

- 1- Observe the rate, rhythm, depth, mode of breathing (thoracic or diaphragmatic) and effort of breathing
- 2- Listen for obvious abnormal sounds with breathing such as wheezes or stridor
- 3- Observe for use of accessory muscles and retractions
- 4- Look for deformities (pectus carinatum, pectus excavatum), or increase in anteroposterior diameter
- 5- Ask the patient to take deep breath and observe for asymmetry
- 6- Look for any scars or skin lesions

B. Palpation

- 1- Check the tracheal position using the tip of the right index finger
- 2- Locate the apex beat
- 3- Palpate for any local tenderness
- 4- Palpate any bulges, deformities, or skin lesions seen by inspection
- 5- Assess chest expansion using both hands while patient is taking deep breath and observe for asymmetry
- 6- Check for tactile vocal fremitus using the ball of the hand on symmetrical areas on both sides of the chest and including the axillary regions feeling vibrations of transmitted sound while the patient saying 44 in Arabic (this step can be skipped because checking the vocal resonance using the stethoscope will give better information)

C. Percussion

1. Start by percussing directly over the clavicles



2. Using both hands percuss symmetrical areas on both sides of the chest moving from infraclavicular region in the intercostal spaces along midclavicular line and over lateral chest wall from 4th to 7th intercostal spaces looking for asymmetry or abnormal percussion note (dullness, stony dullness, and hyperresonance)
3. Check for hepatic and cardiac dullness

D. Auscultation

1. Using the bell of the stethoscope for auscultation is better than the diaphragm
2. During auscultation ask the patient to breathe deeply and rapidly through the mouth
3. Auscultate alternately over symmetrical areas on both sides of the chest and compare findings starting from supraclavicular areas down to 6th intercostal space and alongside lateral walls
4. Avoid auscultation within 2-3 cm from midline as the stethoscope may pick up sounds transmitted directly from the trachea or major Ronchi
5. Listen to breath sounds and observe whether they are normal (vesicular) or abnormal (bronchial)
6. Listen for additional sounds such as crepitations (note their timing in the respiratory cycle and whether they are cleared by coughing), rhonchi, and pleural rub
7. Repeat auscultation while patient saying 44 in Arabic to check for vocal resonance
8. Check for whispering pectoriloquy and egophony if signs of consolidation are found

3- Examination of the posterior aspect of the chest

Examination of the posterior aspect of the chest follows the same sequence:

A. Inspection

- 1- Look for deformities (kyphoscoliosis)
- 2- Ask the patient to take deep breath and observe for asymmetry in chest movement
- 3- Look for scars and skin lesions

B. Palpation

- 1- Identify areas of tenderness or deformities
- 2- Palpate any skin lesions seen in inspection
- 3- Check chest expansion using both hands while the patient is taking deep breath looking for asymmetry in movement
- 4- Quantitative assessment of chest expansion is done by using a tape measure at the level of the nipples while the arms are raised above the head to eliminate scapular movement and ask the patient to take deep breath and take measurement and then ask him to exhale fully and see the difference
- 5- Check for tactile vocal fremitus

C. Percussion

- 1- Start percussion over trapezii and go down until you find Diaphragmatic dullness
- 2- Omit percussion over scapulae and areas close to the midline
- 3- Check for diaphragmatic excursion by percussing down until you reach the diaphragmatic dullness, then ask the patient to take deep inspiration and hold breath, percuss down until you reach dullness and then ask patient to exhale completely and hold breath and percuss up until you reach dullness and notice the difference

D. Auscultation



- 1- Auscultate over symmetrical areas starting from supraclavicular areas and go down comparing both sides and listening for abnormalities in breath sounds or presence of additional sounds
- 2- Avoid auscultation close to midline
- 3- Check for vocal resonance

3-Pediatrics Clinical and Communication Skills Course

Duration : One week

Course description in pediatrics

Day 1: History in pediatrics/to able to

- a. Elicit the details of Perinatal history
 - Mother age
 - Parity
 - Previous pregnancy
 - Maternal diabetes
 - Maternal fever
 - Rupture of membrane
 - Apgar score
 - Neonatal admission
- b. Take different components of the family history
 - Father age
 - Mother age
 - Consanguinity
 - Genetic disease
 - Early death in family
- c. Draw a pedigree of a family with proband with a genetic disease
 - Write plan for children vaccination according to Jordanian national program.
 - Age of vaccination
 - Individual vaccine given at each visit
 - Summarize the difference between the Jordanian national programmed the program-adopted by the UNRWA and that of the American Academy of Pediatrics.

Day 2: History in Pediatrics /to be able to

- a. To ask questions that elicits components of the nutritional history.
 - Breast-feeding
 - Bottle feeding
 - Frequency



- Weight gain
 - Weaning
 - Supplements
 - Urination and stooping
- b. To calculate the caloric requirement of different age groups
- Caloric value in bottle-feeding
 - Caloric value in breast-feeding
 - Different way to increase calories
 - Differences in needs between premature and term infant.
- c. Elicit the details of the growth history.
- Birth weight
 - Head circumference
 - Height
 - Growth percentile

Day 3: physical examination in pediatrics/to be able to

- a. Get the growth parameter for different age groups
- b. Use growth curve for different age group and different sexes
- Use height centile curves
 - Use head circumference centile curve
 - correlate the different values and percentiles of growth parameters to each other and to evaluate the nutritional status of a child
- c. Do developmental assessment in four aspects of developmental milestones
- Gross motor, fine motor & vision, Hearing & Language, and social .
 - To assess hearing in different age groups.
Do distraction test
 - To assess vision in different age groups.
Red reflex, Fixation
- d. To perform different components of the examination of the neurological system in different age groups.
- Tone
 - Power
 - Tendon reflex
 - General activity and alertness
 - Primitive reflexes

DAY 4: Physical examination in pediatrics / to be able to

- a. To perform different components of the general examination of the newborn.



- Head and neck
 - Cardiovascular
 - Respiratory
 - Gastroenteritis
 - Hip exam
 - Femoral pulses
 - Genitalia
 - Anal potency
- b. Perform different component of Pediatrics physical examination
- Cardiac
 - Respiratory
 - Gastroenterology

DAY 5: revision of history and physical examination

- a. performance of full history taking and physical examination
- neonatal
 - Pediatrics
 - developmental assessment
- b. Write up of full history and physical examination
Sample to take for discussion.

1-History in pediatrics

Objective of history

- a. to be able to identify the components and details of the Perinatal history.
- b. To be able to identify the components and to elicit the details of the family history, and to be able to draw a pedigree of a family with a proband with a genetic disease
- c. To identify the Jordanian national program of vaccination, and to identify the differences between the program adapted by the UNRWA and that of the American Academy of Pediatrics, And to be able to elicit the details of the vaccination history.
- d. To identify the components and to elicit the details of the nutritional history
- e. To be able to calculate the caloric requirement of different age groups.
- f. To identify the disease status associated with malnutrition
- g. To be able to elicit the details of the growth and developmental history.
- h. To be able to identify the four aspects of development and the developmental milestones in each aspect. And the range of normal of each developmental milestone.

2.physical examination in pediatrics

objective of physical examination

- a. To be able to get growth parameters for different age groups and to be able to identify the range of normal values of growth parameters and the percentiles.



- b. To be able to correlate the different values and percentiles of growth parameters to each other and to evaluate the nutritional status of a child.
- c. To be able to elicit the development milestones by examination, and to assess hearing and vision in different age groups
- d. To identify the significant and different components of examination of the neurological system in different age groups.
- e. To be able to elicit the primitive reflexes. And to know the normal range for the presence of each primitive reflex.
- f. To identify the significant and different components of the examination of the cardiovascular system in different age groups.
- g. To identify the significant and different components of the examination of the respiratory system in different age groups.
- h. To identify the significant and different components of the examination of the newborn.

Course description in pediatrics

Objectives of history

To be able to identify the components and details of the Perinatal history.

To be able to identify the components and to elicit the details of the family history, and to be able to draw a pedigree of a family with a proband of a genetic disease

To identify the Jordanian national program of vaccination, and to identify the differences between the program adapted by the UNRWA and that of the American Academy of Pediatrics, and to be able to elicit the details of the vaccination history.

To identify the components and to elicit the details of the nutritional history

To be able to calculate the caloric requirement of different age groups.

To identify the disease status associated with malnutrition

To be able to elicit the details of the growth and developmental history.

To be able to identify the four aspects of development and the developmental milestones in each aspect. And the range of normal of each developmental milestone.

Objective of physical examination

To be able to get growth parameters for different age groups and to be able to identify the range of normal values of growth parameters and the percentiles.

To be able to correlate the different values and percentiles of growth parameters to each other and to evaluate the nutritional status of a child.



To be able to elicit the development milestones by examination, and to assess hearing and vision in different age groups

To identify the significant and different components of examination of the neurological system in different age groups.

To be able to elicit the primitive reflexes. And to know the normal range for the presence of each primitive reflex.

To identify the significant and different components of the examination of the cardiovascular system in different age groups.

To identify the significant and different components of the examination of the respiratory system in different age groups.

To identify the significant and different components of the examination of the newborn.

4-Neuro-Muscular Clinical and Communication Skills Course

Duration: 1 week

For the proper examination of the nervous system the following equipment are needed:

1. Reflex hammer
2. Tuning fork
3. A Snellen eye chart
4. Pen light
5. Ophthalmoscope
6. Wooden handled cotton swabs
7. Paper clips

1. Take history from patient or simulated patient with a common neurological problem such as headache, loss of consciousness, or weakness

2. Examination of the mental status and cranial nerves

a. Mental status

Assess level of consciousness, behavior, mood, and orientation



b. Cranial nerves

Observe for:

- i. ptosis (III)
- ii. facial asymmetry (VII)
- iii. hoarseness of voice (X)
- iv. articulation of words (V, VII, X, XII)
- v. abnormal eye position (III, IV, VI)
- vi. abnormal or asymmetrical pupils (II, III)

3- Examine individual nerves:

- 1- Olfactory for sense of smell
- 2- Optic exam :
 - a. fundi
 - b. visual fields
 - c. visual acuity
 - d. pupillary reaction to light
 - e. pupillary reaction to accommodation
- 3- Oculomotor
 - a. observe for ptosis
 - b. test extraocular movements
 - c. pupillary reaction to light
- 4- Trochlear test for extraocular movements
- 5- Trigeminal
 - a. test motor part temporal and masseter muscles
 - b. test 3 divisions for pain sensation
 - c. test for corneal reflex
- 6- Abducent test for extraocular movement
- 7- Facial
 - a. test motor part
 - b. corneal reflex
 - c. taste sensation
- 8- Acoustic
 - a. test hearing
 - b. test lateralization (Weber test)
 - c. compare bone and air conduction
 - d. Check vestibular function
- 9, 10** - Glossopharyngeal and Vagus
 - a. observe speech (nasal or hoarse)
 - b. check swallowing
 - c. palatal movement
 - d. gag reflex
- 11- Accessory
Check motor power of trapezii and sternomastoid



- 12- Hypoglossal
- articulation
 - tongue movements

4- Motor system

Observe

- involuntary movements
- muscle symmetry left vs right and proximal vs distal
- atrophy
- gait

Check muscle tone

Normal, decreased (flaccid) or increased (rigid, spastic)

Muscle strength

Check groups of muscles and remember nerve supply

Grade 0-5

Pronator drift

Coordination and gait

Rapid alternating movements

Point to point movements

Romberg test

Gait

Reflexes

Deep tendon reflexes

Technique

Grading 0-4 (absent-clonus)

Nerve root for each reflex

Plantar response (Babiniski)

5- Sensory system

General

Explain each test before doing it



Patient's eyes always closed
Compare right with left and proximal with distal
Check superficial sensation
Pain
Temperature
Touch
Deep sensation
Vibration
Position
Cortical sensation
Graphesthesia
Stereognosis
Two points

History and Examination of musculoskeletal system:

1. Take history from patient or simulated patient with a common musculoskeletal problem such as arthritis, osteoarthritis, and back pain
2. Recognize signs and symptoms of conditions affecting the musculoskeletal system including
 - Inflammatory joint diseases
 - Degenerative diseases
 - Crystal depositions
 - Traumatic condition (orthopedics)
3. Analyze pain (SOCRATES):
 - Site: Determine which component is painful: the joint (arthralgia), muscle (myalgia) or other soft tissue
 - Onset: ask about how it started: sudden or insidious
 - Character: penetrating, sharp/stabbing, shooting or aching pain
 - Radiation: the student will keep in mind radiating pain and differ it from being another simultaneous pain
 - Associated symptoms: swelling, redness, hotness, deformity,..... .
Timing: frequency, duration and periodicity of symptoms
 - Exacerbating/relieving factors: the student should be able to ask about what makes the pain better or worse for the patient such as: movement, rest or touch
 - Severity:
 - Patterns of joint involvement: small or large joints, does the pain move from one joint to another
4. Stiffness:
 - A. Students should be able to recognize what does the patient mean by stiffness, is it:
 - 1- Restricted joint movement
 - 2- Difficulty moving but normal range of motion
 - 3- Painful movement
 - 4- Particular joint or more generalized



- B. Duration and timing of stiffness:
 1. Early morning that wears off with activity
 2. Mainly after rest that eases rapidly with activity
 - 3.
5. Other local symptoms: Swelling, Erythema, weakness , Locking, triggering
6. Extra Articular Symptoms:
 - Rash: psoriatic, erythema nodosum, malar rash, photosensitivity
 - Raynaud's phenomenon
 - Sicca syndrome (eye and mouth dryness)
 - Mouth ulcers
 - Dysphagia

Examination:

Examination of the musculoskeletal system is an important part of the medical training in clinical years, students will practice examining as many joints as possible to become familiar with normal appearances and range of movements. Students will follow a process of observation, palpation and movement for each joint or group of joints, as what we call Look-Feel-Move.

Look

- General (skin, nails and soft tissues)
- Eye (redness, dryness or other features)
- Mouth
- Skin
- Genital
- local
- Swelling
- Erythema
- Deformity

nodes:

- Rheumatoid nodules
- Heberden's
- Bouchard's

Feel

- Temperature
- Tenderness
- Masses
- Synovial thickening



Move

- Range of movement
- All joints involved
- Referring distal part movement or from neutral

Joints (GALS screen):

- 1- Gait: a limp is an abnormal gait due to pain, structural change or spasticity.
- 2- Arms: Distinguish between systemic and local conditions. Systemic conditions, such as rheumatoid arthritis, usually cause pathology at several sites. Differentiate local conditions from referred or radicular pain. Establish whether the condition is inflammatory or not from the pattern of diurnal stiffness and pain. **Look-Feel-Move.**
- 3- Legs: **Look-Feel-Move.**
- 4- Spine: The spine is divided into the cervical, thoracic, lumbar and sacral segments. Most spinal diseases affect multiple segments, causing altered posture or function of the whole spine. Spinal disease may occur without local symptoms, presenting with referred pain, neurological symptoms or signs in the trunk or limbs.

Definitions:

Scoliosis: is lateral curvature of the spine

Kyphosis: is curvature of the spine in the sagittal plane (anterior-posterior), with the apex posterior.

Lordosis: is curvature of the spine in the sagittal plane, with the apex anterior.

Gibbus: is a spinal deformity caused by an anterior wedge deformity of a single vertebra, producing localized angular flexion.

Special test:

Special tests are used to look specifically for certain signs that can help rule in or out some differential diagnosis, in this course the students will be learning special tests like:

- 1- Tennis/Golfer's elbow (lateral/medial epicondylitis)
- 2- Impingement (painful arc)
- 3- Trendelenburg's sign (tests gluteal muscles)
- 4- Anterior/posterior drawer test (anterior/posterior cruciate ligament)
- 5- McMurray test (Meniscal provocation test)
- 6- shortening
- 7- Achilles's tendon
- 8- Patellar apprehension test
- 9- Thomson's test



ASSESSMANT TOOLS

Write assessment tools that will be used to test students ability to understand the course material and gain the skills and competencies stated in learning outcomes

ASSESSMENT TOOLS	%
Participation, seminars & attendance	15
Mini-OSCE	35
Final written exam	50
TOTAL MARKS	100

THIRD: COURSE RULES

ATTENDANCE RULES

Attendance and participation are extremely important, and the usual University rules will apply. Attendance will be recorded for each class. Absence of 10% will result in a first written warning. Absence of 15% of the course will result in forfeiting the course and the student will not be permitted to attend the final examination. Should a student encounter any special circumstances (i.e. medical or personal), he/she is encouraged to discuss this with the instructor and written proof will be required to delete any absences from his/her attendance records.

GRADING SYSTEM : Example

Points	Grade
	A
	A-
	B+
	B
	B-
	C+
	C
	C-
	D+
	D
	D-
	F



REMARKS

Students will be encouraged to participate in research

COURSE COORDINATOR

Course Coordinator: Dr. Bandar Ghazal

Department Head:

Signature:

Signature:

Date:

Date: