DISSECTION SCHEDULE

Session I - Hip (Front) & Thigh (Superficial)

Surface anatomy
- Inguinal region
- Gluteal region
- Thigh
- Leg
- Foot bones
- Hip bone
- Femur

Dissection
- Superficial fascia
- Great saphenous vein
- Superficial inguinal lymph nodes
- Superficial branches of femoral artery
- Superficial inguinal ring
- Spermatic cord
- Inguinal ligament
- Saphenous opening
- Deep fascia (fascia lata)

Self study
- Features & attachments of Hip bone and femur
- Iliotibial tract and its functions
- Location and drainage of superficial inguinal lymph nodes
- Cutaneous nerves
- Origin, course, termination & tributaries of the great saphenous vein

Session II - Hip (Front) & Thigh (Deep)

Dissection
- Femoral sheath
- Femoral artery & branches, profunda artery & its branches
- Femoral vein
- Femoral canal
- Femoral triangle
- Femoral nerve & branches
- Adductor canal

Self study
- Boundaries and contents of femoral triangle
- Formation and contents of Femoral sheath
- Femoral hernia
- Boundaries and contents of adductor canal
- Origin, course, termination & branches of femoral artery
- Origin, root value, course and distribution of femoral nerve

Muscles
- Sartorius
- Pectineus
- Iliopsoas
- Tensor fascia lata
- Rectus femoris
- Vastus lateralis
- Vastus medialis
- Vastus intermedius
Session III - Hip & Thigh (Medial Compartment)

Dissection

Vessels
- Medial circumflex femoral vessels
- Obturator vessels

Nerve
- Anterior and posterior branches of obturator nerve

Muscles
- Adductor longus
- Adductor brevis
- Pectineus
- Gracilis
- Adductor magnus
- Obturator externus

Self study
- Attachments, nerve supply and actions of Adductor longus
  Adductor brevis
  Gracilis
  Adductor magnus
  Pectineus
  Obturator externus
- Origin, root value, course and distribution of Obturator nerve
  Accessory obturator nerve
- Origin, course & termination of medial circumflex femoral artery

Session IV - Gluteal Region

Surface anatomy
- Gluteal fold, natal cleft
- Ischial tuberosity
- Posterior superior iliac spine

Dissection
- Cutaneous nerves

Muscles
- Gluteus maximus, medius & minimus
- Piriformis & quadratus femoris
- Tendon of obturator internus, externus
- Superior and inferior gemelli
- Hamstring muscles

Nerves
- Posterior cutaneous nerve of thigh
- Sciatic nerve
- Nerve to quadratus femoris
- Nerve to obturator internus
- Pudendal nerve
- Superior & inferior gluteal nerve

Vessels
- Superior & inferior gluteal vessels
- Internal pudendal vessels
- Medial circumflex femoral artery
- First perforating artery

Bursa
- Bursa under gluteus maximus

Ligaments
- Sacrotuberous & sacrospinous

Self study
- Cutaneous nerve supply of gluteal region
- Attachments, nerve supply and actions of
  Gluteus maximus
  Piriformis & obturator internus
  Superior and inferior gemelli
  Quadratus femoris
  Gluteus medius
  Gluteus minimus
- Origin, root value, course and distribution of
  Sciatic nerve
  Superior gluteal nerve
  Inferior gluteal nerve
  Pudendal nerve
  Nerve to obturator internus
  Nerve to quadratus femoris
- Origin, course, termination and branches of
  Superior gluteal artery
  Inferior gluteal artery
- Cruciate anastomosis
- Trochanteric anastomosis
Session V - Popliteal Fossa and Back of Thigh

Dissection

Muscles
- Biceps femoris (long & short head)
- Semitendinosus
- Semimembranosus
- Lateral and medial heads of gastrocnemius
- Gracilis
- Sartorius
- Popliteus

Nerves
- Posterior cutaneous nerve of thigh
- Sural nerve
- Lateral cutaneous nerve of calf
- Tibial nerve and its branches (muscular and genicular)
- Common peroneal nerve

Vessels
- Popliteal artery and its branches
- Popliteal vein and its tributaries
- Small saphenous vein

Self study
- Boundaries and contents of popliteal fossa
- Origin, root value, course and distribution of Sciatic nerve
  Tibial nerve
  Common peroneal nerve
- Origin, course, termination and branches of Profunda femoris artery
  Popliteal artery
- Formation, course, termination and tributaries of popliteal vein
- Attachments, nerve supply and actions of Biceps femoris
  Semitendinosus
  Semimembranosus

Session VI - Hip joint

Dissection

Exposure of hip joint
- Hip joint capsule
- Ligaments - esp. iliofemoral ligament
- Bursae
- Ligament of head of femur

Self study
- Hip joint
  Type, articulation, ligaments, relations, nerve supply, blood supply, movements, applied anatomy

John Hunter
(1728 –1793)

He was a Scottish surgeon regarded as one of the most distinguished scientists and surgeons of his day.

He was an excellent anatomist; his knowledge and skill as a surgeon was based on sound anatomical background. Among his numerous contributions to medical science are study of human teeth, development of a child, gun-wounds and the lymphatic system.

Hunter’s canal - Adductor / Subsartorial canal
Session VII - Front & Sides of Leg and Dorsum of Foot

Bones
- Tibia
- Fibula
- Bones of foot

Dissection

Front of leg & dorsum of foot
- Dorsal venous arch
- Great saphenous vein
- Small saphenous vein
- Superficial peroneal nerve
- Superior and inferior extensor retinacula
- Tibialis anterior
- Extensor hallucis longus
- Extensor digitorum longus
- Peroneus tertius
- Anterior tibial vessels
- Dorsalis pedis artery
- Deep peroneal nerve

Lateral side
- Superior and inferior peroneal retinacula
- Peroneus longus
- Peroneus brevis

Medial side
Tendons and insertion of
- Sartorius
- Gracilis
- Semitendinosus
- Semimembranosus

Self study

- Attachments and functions of retinacula & intermuscular septa

- Attachments, nerve supply, and actions of
  - Tibialis anterior
  - Extensor hallucis longus
  - Extensor digitorum longus
  - Peroneus tertius
  - Extensor digitorum brevis
  - Peroneus longus
  - Peroneus brevis

- Origin, course, termination & branches of
  - Anterior tibial artery
  - Dorsalis pedis artery

- Origin, root value, course and distribution of
  - Common peroneal nerve
  - Superficial peroneal nerve

Friedrich Trendelenburg
(1844-1924)

Trendelenburg was a great practical surgeon who was keenly interested in the history of surgery. His doctoral thesis 'De Veterum Indorum Chirurgiais' discussed ancient Indian surgery.

Trendelenburg’s test for varicose veins – to test the saphenofemoral incompetence.

Trendelenburg’s sign – tilting of the pelvis to the sound side on failure of the abductor mechanism of the hip joint.
Dissection
- Sural nerve
- Small saphenous vein
- Flexor retinaculum
- Medial & lateral heads of gastrocnemius
- Plantaris
- Soleus
- Tendocalcaneus
- Popliteus
- Flexor digitorum longus
- Flexor hallucis longus
- Tibialis posterior
- Tibial nerve
- Posterior tibial vessels
- Peroneal artery

Self study
- Superficial veins of lower limb
- Lymphatics & lymph nodes of lower limb
- Attachments, nerve supply and actions of Gastrocnemius, soleus & plantaris
  - Tibialis posterior
  - Flexor digitorum longus
  - Flexor hallucis longus
  - Popliteus
- Flexor retinaculum – attachments and relations
- Origin, course, termination and branches of posterior tibial & peroneal artery
- Origin, root value, course and distribution of tibial nerve
- Anastomosis around knee joint & ankle joint

Session IX - Sole of Foot

Dissection:
- Plantar aponeurosis
- Fibrous flexor sheaths
- Abductor hallucis
- Flexor digitorum brevis
- Abductor digiti minimi
- Medial and lateral plantar nerves & vessels
- Flexor hallucis longus tendon
- Flexor digitorum longus tendon
- Flexor accessorius
- Lumbricals
- Flexor hallucis brevis
- Adductor hallucis
- Flexor digiti minimi brevis

Self study
- Deep branch of lateral plantar nerve
- Plantar arch
- Plantar and dorsal interossei
- Sesamoid bones
- Tendon of peroneus longus
- Tendon of tibialis posterior

- Arches of foot
  - Types
  - Factors maintaining the arches
  - Functions
  - Abnormalities
- Functional importance of the intrinsic muscles of the sole of the foot in maintenance of arches of foot

(Applications of individual muscles need not be known)
Session X - Knee joint

Dissection
- Articular capsule
- Collateral ligaments
- Ligamentum patellae, oblique popliteal ligament
- Medial and lateral menisci
- Infrapatellar synovial fold and pad of fat
- Anterior and posterior cruciate ligaments
- Bursae around knee
- Tendon of popliteus and arcuate ligament

Self study
- Knee joint
  - Type
  - Articulation
  - Ligaments
  - Relations
  - Interior
  - Blood supply
  - Nerve supply
  - Movements
- Locking and unlocking of knee joint
- To draw and label interior of knee joint

Session XI - Ankle joint and Joints of foot

Dissection
- Capsule & ligaments of ankle joint
- Plantar calcaneonavicular ligament
- Long plantar ligament

Self study
- Ankle joint
  - Type, articulation, ligaments, blood supply, nerve supply & movements
- Subtalar and transverse tarsal joints
- Inversion and eversion movements

DEMONSTRATIONS

1. Hip bone
2. Inguinal lymph nodes; femoral triangle & adductor canal
3. Femur; adductor muscles; obturator nerve
4. Gluteal region - gluteal muscles & sciatic nerve
5. Hamstring muscles; popliteal fossa
6. Hip joint
7. Tibia, fibula, patella
8. Muscles, vessels & nerves of the leg
9. Arches of foot; applied anatomy of foot
10. Knee joint, interior of knee
11. Ankle joint; inversion / eversion of the foot

TOPICS ANNEXED TO SESSION GOALS

- Great saphenous vein
- Femoral hernia
- Lumbar plexus
- Cutaneous nerves of gluteal region
- Trochanteric and cruciate anastomoses
- Lymphatic drainage of lower limb
- Intermuscular septa & retinacula of leg
- Anastomosis around knee & ankle
- Intrinsic muscles of sole
- Locking of knee joint
- Intertarsal joints

Topics for Clinical Integration (covered in Applied Anatomy lecture)

- Nerve injuries and nerve conduction
- Varicose veins
- Fracture neck of femur and dislocation of head of femur
- Surgical approaches