

## Bony Landmarks of the Lower Extremity

**\*NOTE:** These bony landmarks have an associated muscle(s) that attaches there, form part of a joint, or have neurovascular structures running through them. You should be familiar with the associated structures for the bony landmarks in this chart. Many of these landmarks are the same structures listed in the muscle charts, so in most cases, this is simply a different way to study the same material.

This is NOT an inclusive list. You should be able to identify all landmarks listed on the list of terms for lab 1.

Bone	Bony Landmark	Associated Structures
Ilium	Iliac fossa	<i>Origin:</i> iliacus muscle
	Anterior superior iliac spine	<i>Origin:</i> sartorius
	Anterior inferior iliac spine	<i>Origin:</i> rectus femoris
	Greater sciatic notch	Becomes the greater sciatic foramen as the sacrospinal ligament closes the notch. The piriformis passes through it. The superior gluteal vessels & nerve pass above the piriformis in this foramen, & the inferior gluteal vessels & nerves & sciatic nerve pass inferior to the piriformis.
Ischium	Ischial tuberosity	<i>Origin:</i> semimembranosus, semitendinosus, long head of the biceps femoris, and the hamstring part of the adductor magnus (hamstrings)
	Lesser sciatic notch	Becomes the lesser sciatic foramen when the sacrotuberous ligament closes the notch. Transmits the obturator internus tendon, the nerve to the obturator internus, and other vessels and nerves to the pelvis.
	Lunate surface	Articular surface of the acetabulum. <b>Acetabulum</b> is the articular surface of the pelvis that articulates with the head of the femur, and it is formed by all three bones. Definitely be able to identify the acetabulum!
	Obturator foramen	Obturator artery, vein, and nerve pass through it. (ischium and pubis)
Pubis		
Femur	Head	Articulates with the acetabulum
	Fovea	Attachment site for the ligament of the head of the femur
	Greater trochanter	<i>Insertion:</i> gluteus medius and gluteus minimus <i>Origin:</i> vastus lateralis
	Lesser trochanter	<i>Insertion:</i> psoas major and iliacus muscles as the iliopsoas
	Gluteal tuberosity	<i>Insertion:</i> gluteus maximus
	Linea aspera	<i>Origin:</i> vastus lateralis, vastus medialis, & short head of biceps femoris <i>Insertion:</i> adductor longus, adductor brevis, hamstring part adductor magnus
	Medial & lateral condyles	Articular surfaces, articulate with the tibia
	Medial epicondyle	Attachment site for the medial collateral ligament (MCL) <i>Origin:</i> medial head of the gastrocnemius
	Lateral epicondyle	Attachment site for the lateral collateral ligament <i>Origin:</i> lateral head of the gastrocnemius
	Intercondylar fossa	Attachment site for the cruciate ligaments of the knee
Patellar surface	Articular surface, articulates with the patella	
Tibia	Medial & lateral condyles	Articular surfaces, articulate with the tibia
	Fibular articular facet	Articular surface, articulates with the fibula
	Tibial tuberosity	<i>Insertion:</i> quadriceps muscle group
	Gerdy's tubercle	<i>Insertion:</i> iliotibial tract (band)
	Pes anserine insertion	<i>Insertion:</i> semitendinosus, sartorius, and gracilis
Medial malleolus	Attachment site for ligaments of the talocrural (ankle) joint	
Fibula	Head	Insertion point for the biceps femoris
	Lateral malleolus	Attachment site for ligaments of the talocrural (ankle) joint

\*\*\*You do not need to memorize the associated structures for these bony landmarks, but just in case you are wondering, here they are. **You ARE responsible for identifying these landmarks.**

<b>Bone</b>	<b>Bony Landmark</b>	<b>Associated Structures</b>
<b>Ilium</b>	<b>Iliac crest</b>	<i>Origin:</i> gluteus maximus, gluteus medius, tensor fasciae latae
	<b>Posterior superior iliac spine</b>	Ligament attachment site
	<b>Posterior inferior iliac spine</b>	Ligament attachment site
<b>Ischium</b>	<b>Ischial spine</b>	Attachment point for the sacrospinous ligament
<b>Pubis</b>	<b>Superior rami</b>	Forms part of the obturator foramen
	<b>Inferior rami</b>	<i>Origin:</i> adductor brevis, adductor part of the adductor magnus, and gracilis; Forms part of the obturator foramen
	<b>Pubic crest</b>	Attachment site for muscles of the abdominal wall
	<b>Pubic tubercle</b>	Attachment site for the inguinal ligament
	<b>Pectineal line</b>	<i>Origin:</i> pectineus muscle.
<b>Femur</b>	<b>Neck</b>	Weakest part of the femur, attaches head to shaft
	<b>Medial &amp; lateral supracondylar lines</b>	Extensions of the linea aspera, site of muscle attachment