

ANAT20006

Principles of Structure and Function of the Human Body

LECTURE NOTES - WEEK 1

Lecture 1: Anatomical Terminology • Lecture 2: Nervous System I • Lecture 3: Peripheral Nervous System

HOW TO USE THESE NOTES

- Bold navy terms are exam-relevant keywords - know their definitions.
- Blue Key Term boxes give clean, quotable definitions for quick revision.
- Gold Concept boxes highlight the why, the logic that ties ideas together.
- Red Clinical Relevance boxes connect content to real-world/clinical scenarios - great for SAQs.

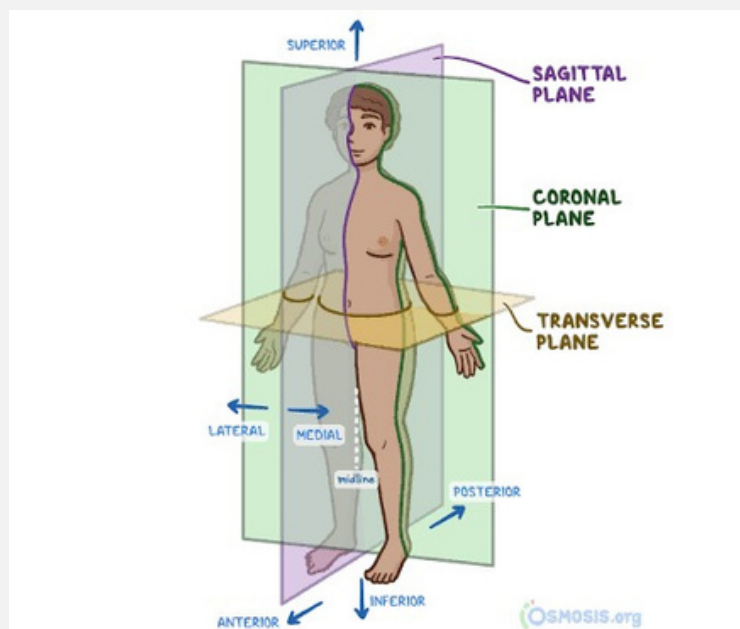
LECTURE 1

Anatomical Terminology

Anatomy has its own language. Almost every directional or positional term exists as part of an opposite pair - learning them together, as relationships rather than isolated words, makes them far easier to recall under exam pressure.

1.1 The Anatomical Position

All anatomical terminology is described relative to a single reference posture: the anatomical position. Standing upright, facing forward, arms by the sides, palms facing forward. Every directional term in this course assumes the body is in this position, regardless of how the body is actually oriented in real life.



1.2 Directional Terms - Paired Opposites

These terms work in opposite pairs. Learn each pair together rather than as separate vocabulary.

Term	Opposite	Meaning
Anterior	Posterior	Towards the front / towards the back of the body
Superior	Inferior	Towards the head / towards the feet
Proximal	Distal	Closer to / further from the point of attachment (used for limbs)
Medial	Lateral	Towards the midline / away from the midline

Term	Opposite	Meaning
Superficial	Deep	Closer to the body surface / further from the surface, towards the internal structures

KEY TERM

Median-The single, exact mid-line of the body - there is only ever one median line. Medial describes movement toward this line, and lateral describes movement away from it.

THINK IN RELATIONSHIPS, NOT LISTS

- Anterior view = facing toward the observer; lateral view = viewed from the side.
- Layers of the body run from superficial (skin) to deep (internal structures).
- Superficial structures (e.g. superficial muscles) tend to be longer than the deep structures beneath them.

1.3 Anatomical Planes

The body can be sliced along three reference planes, each producing a different pair of sections.

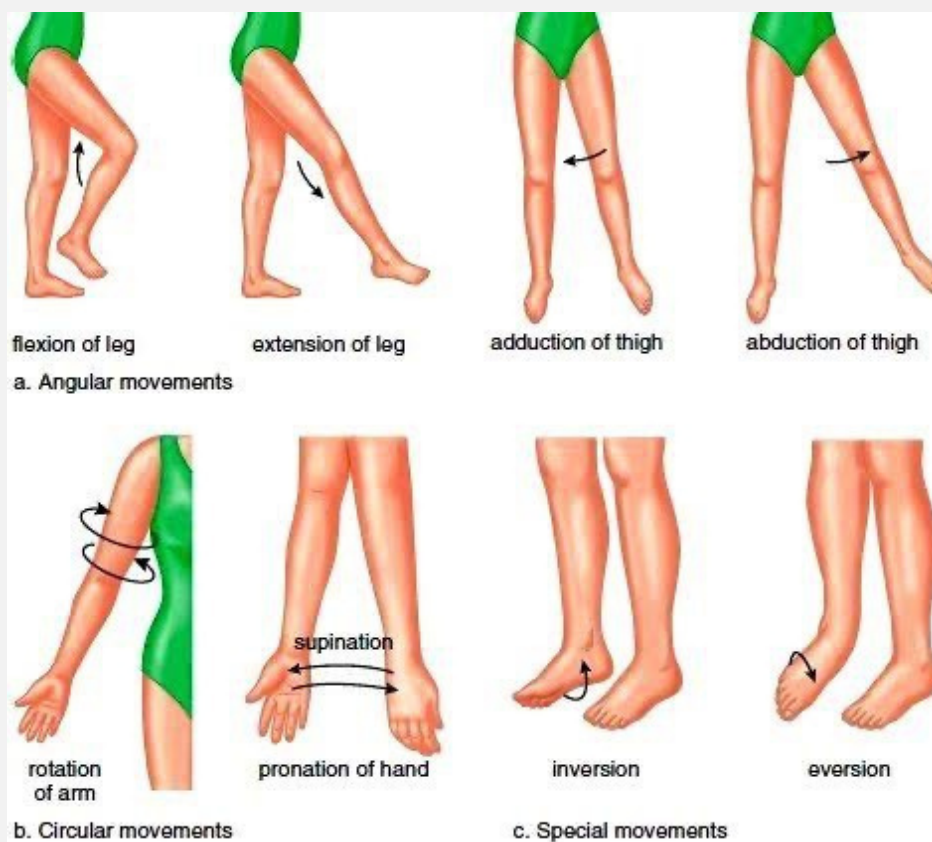
Plane	Orientation	Produces
Transverse (horizontal)	Cuts straight across the body	Superior and inferior portions
Sagittal	Cuts front-to-back, along the midline	Left and right portions
Coronal (frontal)	Cuts vertically, side to side	Anterior and posterior portions

1.4 Movement Terminology

Term	Opposite	Meaning
Flexion	Extension	Bending a joint, decreasing the joint angle / straightening a joint, increasing the joint angle
Abduction	Adduction	Moving a limb away from the torso / moving a limb back towards the torso
Internal (medial) rotation	External (lateral) rotation	Rotating a limb towards the midline (chest) / rotating a limb away from the midline

WORKED EXAMPLE: THE FOETAL POSITION

The foetal position is the clearest example of pure flexion - every major joint (hips, knees, spine, neck) is flexed simultaneously, curling the body inward. Picturing this position is a quick way to remember what flexion looks like across the whole body, not just at one joint.



1.5 Quick Reference: Useful Word Roots

KEY TERM

Brachi- - Prefix referring to the forelimb (e.g. brachial = relating to the arm).