

**SNS COLLEGE OF ALLIED HEALTH SCIENCE**

**Affiliated to The Tamil Nadu Dr. M.G.R Medical University, Chennai**

**DEPARTMENT OF RADIOGRAPHY AND IMAGING TECHNOLOGY**

**COURSE NAME : HUMAN ANATOMY AND PHYSIOLOGY RELEVANT TO RADIOLOGY**

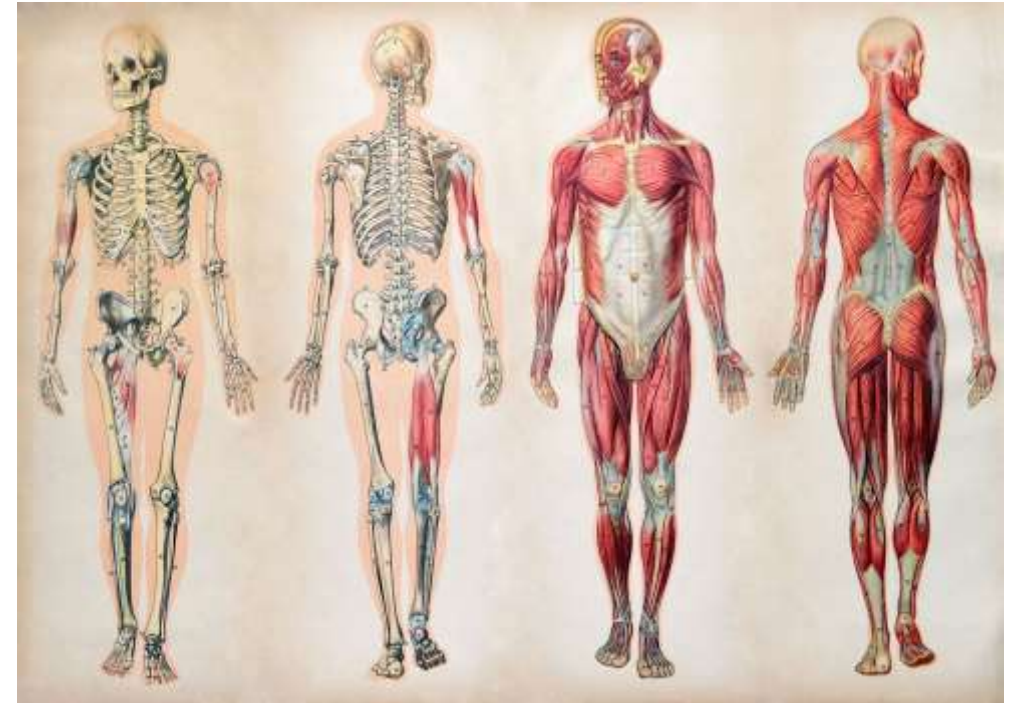
**UNIT : GENERAL STRUCTURE OF HUMAN BODY**

**TOPIC : ANATOMICAL TERMINOLGY,PLANES OF SECTION**

**FACULTY NAME : MRS.G.HELANA JOY**

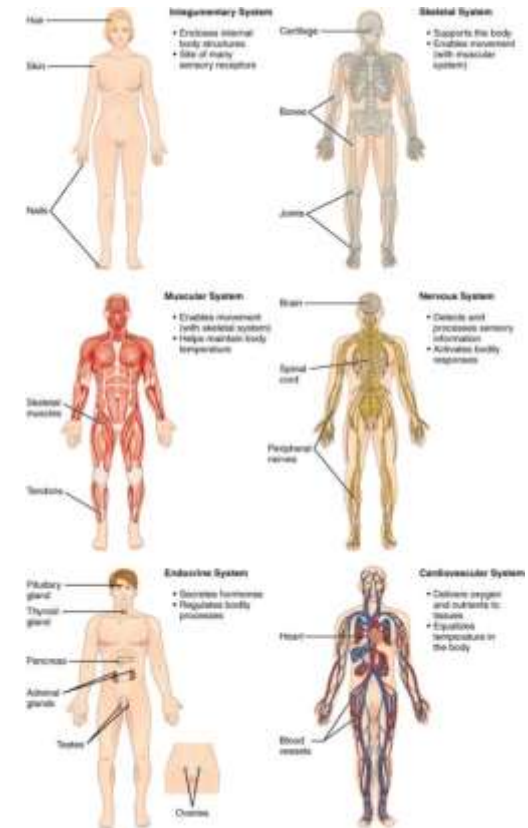
# INTRODUCTION TO ANATOMY (Define)

- Anatomy is the identification and description of the structures of living things.
- It is a branch of biology and medicine.



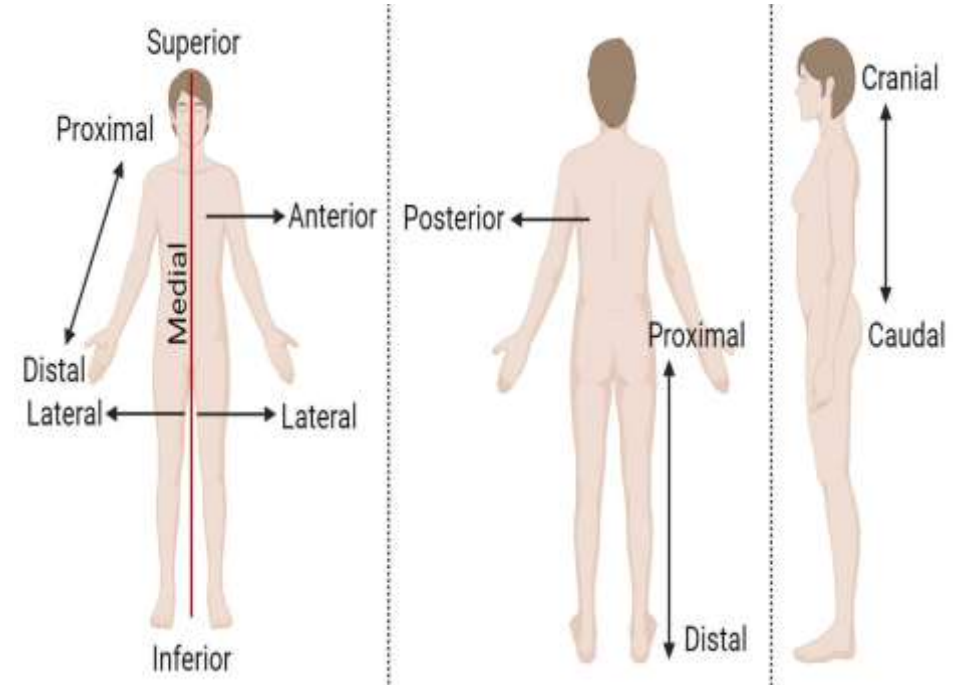
# GROSS ANATOMY

- In medicine, gross, macro, or topographical anatomy refers to the study of the biological structures that the eye can see.
- The study of gross anatomy may involve dissection or noninvasive methods.
- The aim is to collect data about the larger structures of organs and organ systems



# ANATOMICAL DIRECTIONS

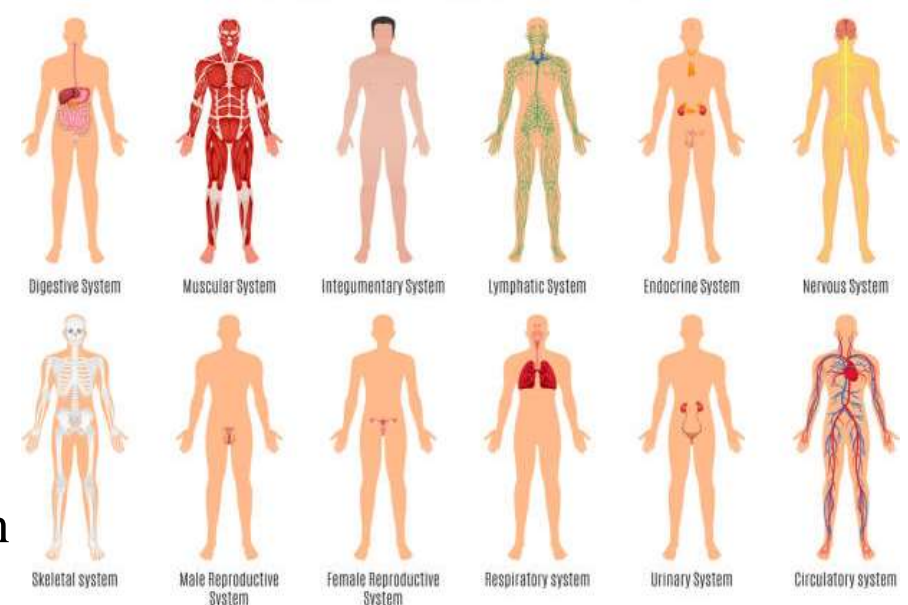
- Anterior (Ventral): Front of the body.
- Posterior (Dorsal): Back of the body.
- Superior: Upper part or above.
- Inferior: Lower part or below.
- Medial: Closer to the midline.
- Lateral: Away from the midline.
- Proximal: Closer to the point of attachment.
- Distal: Farther from the point of attachment.



# HUMAN ORGAN SYSTEMS

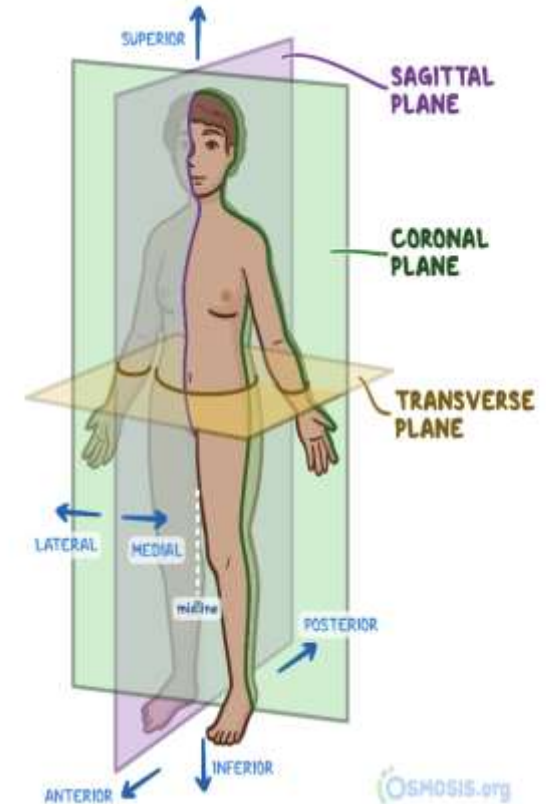
There are 11 organ systems in the human body:

- The Skeletal System
- The Muscular System
- The Lymphatic System
- The Respiratory System
- The Digestive System
- The Nervous System, including
- The Central And Autonomic Systems
- The Endocrine System, which Regulates Hormone Production
- The Cardiovascular System, including The Heart The Urinary System
- The Reproductive System
- The Integumentary system, Which Includes The Skin, Hair, And Nails, Among Other Areas



# PLANES OF THE BODY

- The anatomical planes used to describe the location of structures in human anatomy.
- They are applied to the human body in the anatomical position.
- The three most commonly used planes: **sagittal**, **coronal** and **transverse**.



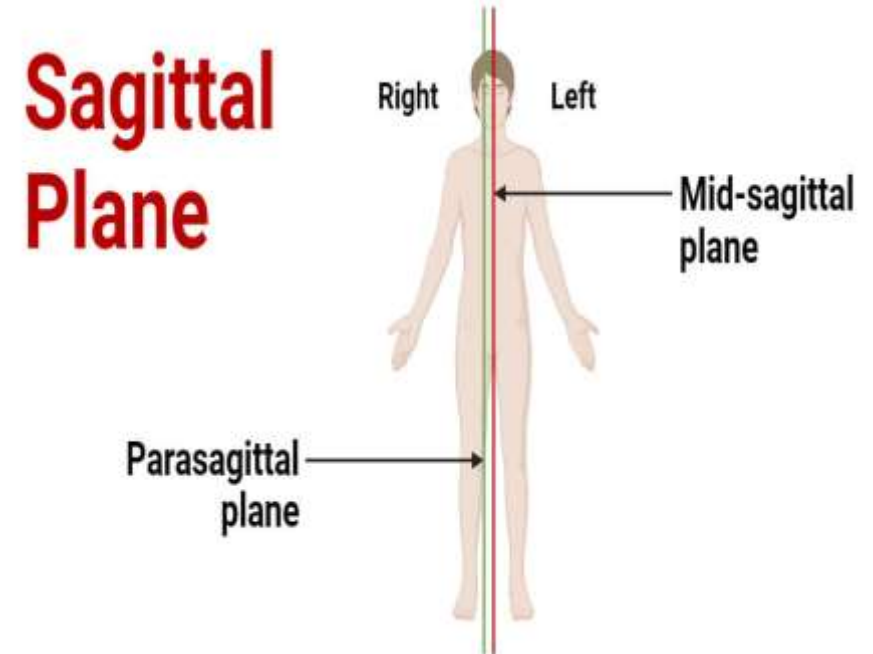
# SAGITTAL PLANE

- Divides the body into **left and right** parts.
- Runs vertically, parallel to the midline.

Types:

- **Midsagittal (Median) Plane:** Divides the body into equal left and right halves.
- **Parasagittal Plane:** Divides the body into unequal left and right parts.

**Example movements:** Flexion and extension (e.g., bending and straightening the elbow).

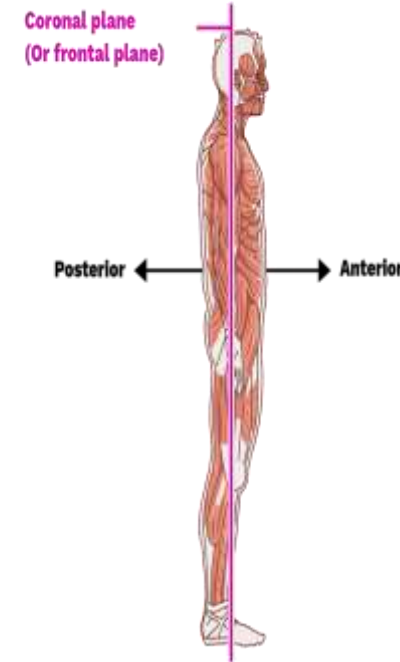




# FRONTAL (CORONAL) PLANE

- Divides the body into **anterior (front) and posterior (back)** parts.
- Runs vertically, perpendicular to the sagittal plane.

**Example movements:** Abduction and adduction (e.g., raising arms sideways).

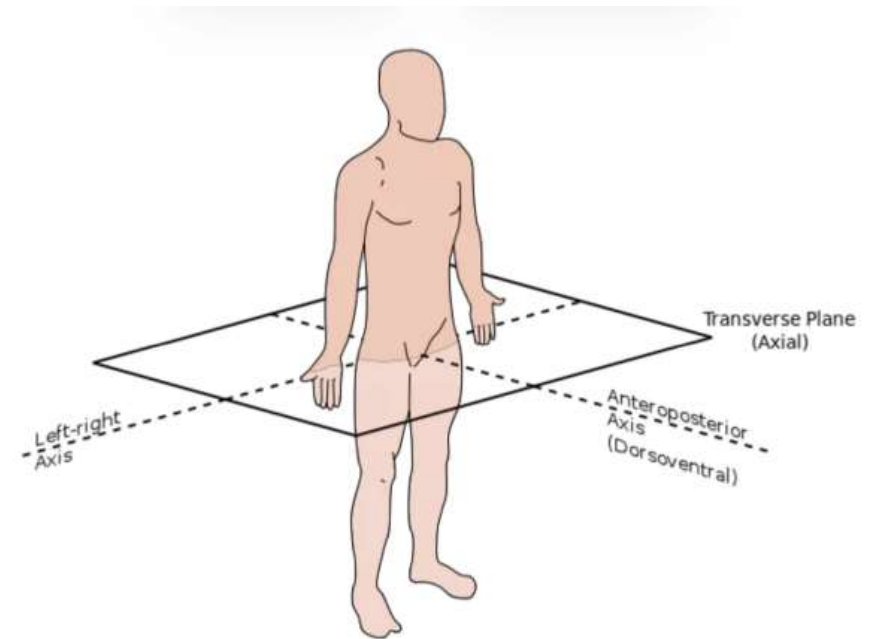




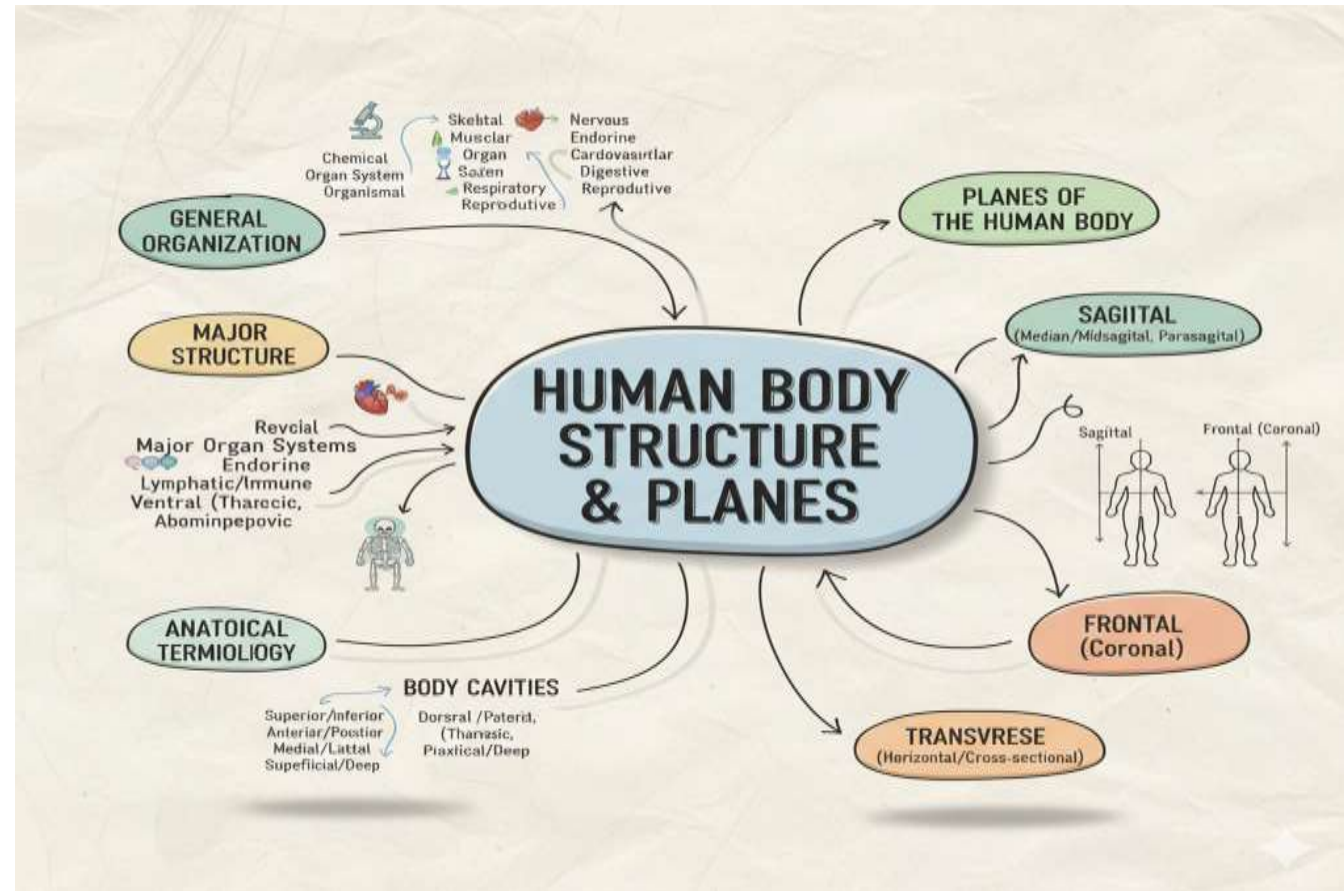
# TRANSVERSE (HORIZONTAL) PLANE

- Divides the body into **superior (upper) and inferior (lower)** parts.
- Runs horizontally, perpendicular to the long axis of the body.

**Example movements:** Rotation (e.g., turning the head).



# SUMMARY



# References

- Anatomy and Physiology 2e by OpenStax (2022): Discusses planes in Chapter 1, with illustrations of sagittal, coronal, and transverse planes.
- <https://openstax.org/books/anatomy-and-physiology-2e/pages/1-6-anatomical-terminology>
- <https://university.pressbooks.pub/test456/chapter/mapping-the-body/>