# 58a – Clinical Assessment: Structural Anatomy Part 1

# 58a Clinical Assessment: Structural Anatomy Part 1
## Class Outline

| | |
|---|---|
| 5 minutes | Attendance, Breath of Arrival, and Reminders |
| 25 minutes | Lecture |
| 30 – 50 minutes | Group Activity (may need to borrow 10 minutes from "b" class |
| 60 - 80 minutes | Total |

# 58a Clinical Assessment: Structural Anatomy Part 1
## Class Reminders

**Assignments:**

- 62a Deep Tissue Outside Massages (due before class starts)
- 64b Executive Summary (due before the end of class)
  Packet pages 21-22; Sections 1-4 to be done ***in*** class.
  The completed Executive Summary to be handed in at end of class.

**Quizzes and Exams:**

- 60a Exam

**Practical Exams:**

- 62b Deep Tissue: Touch Assessment

**Preparation for upcoming classes:**

- 58a Clinical Assessment: Structural Anatomy (Part I)
- 58b Deep Tissue: Technique Demo and Practice – Anterior Upper Body
  Packet D: 27-30.

# Classroom Rules

**Punctuality** - everybody's time is precious

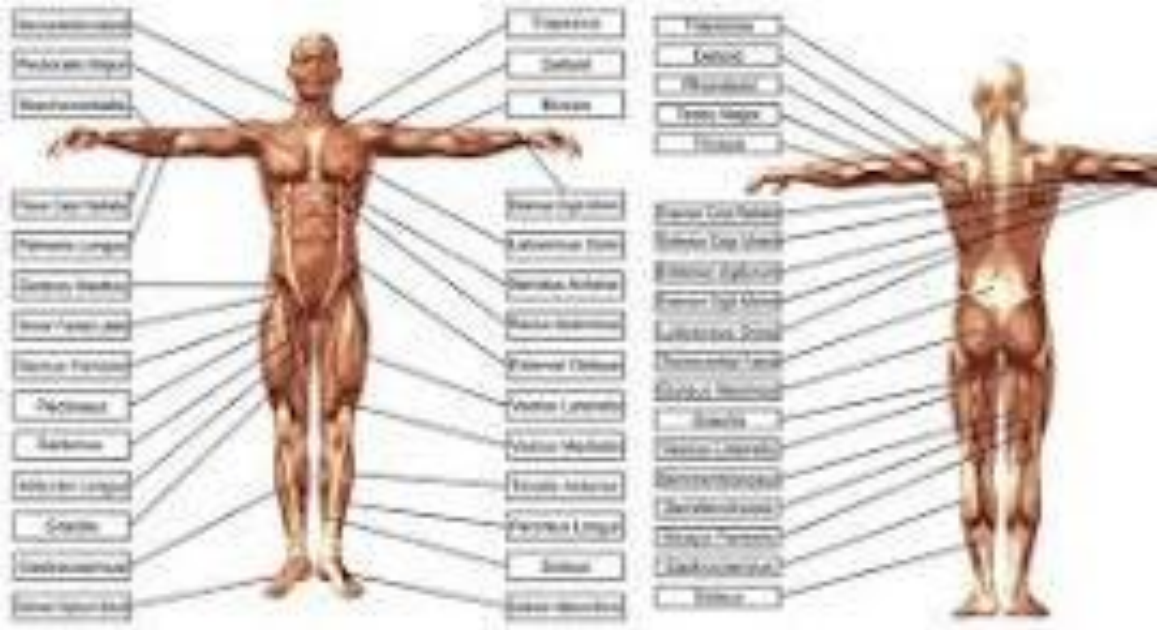
- Be ready to learn at the start of class; we'll have you out of here on time
- Tardiness: arriving late, returning late after breaks, leaving during class, leaving early

**The following are not allowed:**

- Bare feet
- Side talking
- Lying down
- Inappropriate clothing
- Food or drink except water
- Phones that are visible in the classroom, bathrooms, or internship

*You will receive one verbal warning, then you'll have to leave the room.*

# Class 58a – Clinical Assessment: Structural Anatomy Part 1



**What is structural assessment and dysfunction analysis?**

# Structural Assessment and Dysfunction Analysis

**What is the goal of structural assessment and dysfunction analysis?**

When visually assessing a client's body, the goal is to find chronic holding patterns.

Holding patterns are one of the results of unconscious and habitual shortening of the tissues.

***For example:***

- compensation by favoring one shoulder/leg/arm due to an injury
- carrying a heavy backpack/purse
- a parent favoring one side over the other to carry their child
- sitting on a thick wallet
- side-sleeping with a closed fist under the pillow/head
- a short person holding their shoulders up; a tall person slumping or slouching their shoulders
- Repetitive stress injury (RSI)

# Structural Assessment and Dysfunction Analysis

**The keys to structural assessment are:**

- The vertical and horizontal lines that compose the body's structure.

- Assessing the body's structural anatomy visually can tell us a great deal about what is going on with the structural tissues, especially the muscles.

  1. Compensation often occurs within a body – this is often one of the leading causes for clients to seek out massage therapy (though they may not realize this is the root cause). Compensation generally means that the "normal" or expected horizontal and vertical lines within the body's structure are being compromised.
  2. Compensation ultimately causes pain and fascial contraction.
  3. Structural dysfunction sets in causing interference with performance of normal activities and tasks, obstructing the body's innate ability to repair itself.

# Structural Assessment and Dysfunction Analysis

**The keys to structural assessment …**

***For example:***

- compensation by favoring one shoulder/leg/arm due to an injury
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# Structural Assessment and Dysfunction Analysis

**Two critical observations about structural assessment and dysfunction analysis:**

- Structural assessment recognizes that the various types of muscles have different shapes and muscle fiber orientation and carry different types of loads.

- Injury, pain, and dysfunction can result when a muscle carries a load or performs a task that is not aligned with its structure.

# Structural Assessment and Dysfunction Analysis

**There are eight unique muscle types to consider for structural assessment:**

| Image | Muscle Type | Description | Examples | Load |
|---|---|---|---|---|
|  | Strap / Longitudinal Muscle | • few muscle fibers<br>• length greater than width<br>• small tendons<br>• has greater ROM | Gracilis, Sartorius | |

# Structural Assessment and Dysfunction Analysis

**There are eight unique muscle types to consider for structural assessment:**

| Image | Muscle Type | Description | Examples | Load |
|---|---|---|---|---|
|  | Fusiform Muscle | • most muscles – parallel fibers<br>• typically has a rounded belly<br>• narrowed tendons<br>• trades ROM for strength | Biceps Brachii | |

# Structural Assessment and Dysfunction Analysis

**There are eight unique muscle types to consider for structural assessment:**

| Image | Muscle Type | Description | Examples | Load |
|---|---|---|---|---|
|  | Triangular / Convergent Muscle | • commonly found around ball and socket joints<br>• broad attachment at one end, single attachment at other<br>• greater ROM and strength | Pectoralis Major, Piriformis | |

# Structural Assessment and Dysfunction Analysis

**There are eight unique muscle types to consider for structural assessment:**

| Image | Muscle Type | Description | Examples | Load |
|---|---|---|---|---|
|  | Unipennate Muscle | • short, oblique fibers arise from one side of a central tendon<br>• stronger due to being larger | Most forearm muscles | |

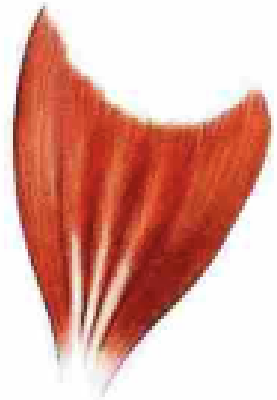
# Structural Assessment and Dysfunction Analysis

**There are eight unique muscle types to consider for structural assessment:**

| Image | Muscle Type | Description | Examples | Load |
|---|---|---|---|---|
|  | Bipennate Muscle | • short, oblique fibers that arise from both sides of a central tendon<br>• force generators | Rectus Femoris | |

# Structural Assessment and Dysfunction Analysis

**There are eight unique muscle types to consider for structural assessment:**

| Image | Muscle Type | Description | Examples | Load |
|---|---|---|---|---|
|  | Multipennate Muscle | • complex branching form of the bipennate type muscle<br>• strongest but has very little ROM | Deltoid, Gluteus Minimus | |

# Structural Assessment and Dysfunction Analysis

**There are eight unique muscle types to consider for structural assessment:**

| Image | Muscle Type | Description | Examples | Load |
|---|---|---|---|---|
|  | Quadrate Muscle | • four-sided muscle<br>• stablizers<br>• other associated functions | Quadratus Femoris, Quadratus Lumborum, Rhomboids | |

# Structural Assessment and Dysfunction Analysis

**There are eight unique muscle types to consider for structural assessment:**

| Image | Muscle Type | Description | Examples | Load |
|---|---|---|---|---|
|  | Circular Muscle | • circular in shape<br>• closed when contracted<br>• open when relaxed | Oris Orbicularis, Diaphragm | |

# Structural Assessment and Dysfunction Analysis

**STRUCTURAL ASSESSMENT**
*(This section refers to the body diagrams on the handout.)*

1. **Proper Alignment – what to look for**
   *(instructor demonstrates what these aligned or proper postures/stances look like)*

→ The knees and ankles should be aligned with the feet pointed straight forward.

→ The hips should be firmly planted over symmetrical knees.

→ The shoulders should sit directly over level hips.

→ The head is centered over level shoulders.

→

## STRUCTURAL ASSESSMENT

*(This section refers to the body diagrams on the handout.)*

2. **Viewing Steps – how to do the visual structural assessment**

→ Start globally first – stand far enough back to view the entire structure at once.

→ Use palpation as necessary to reinforce visual findings.

→ Start from the feet and move up.

→ Don’t focus on the symptoms.

# Structural Assessment and Dysfunction Analysis

**VIEWING THE BODY USING ANATOMICAL LANDMARKS**
*(Following the Instructor's lead, students will pair up and do a basic structural assessment on each other in a trade format.)*

1. **Horizontal Lines –**
   *View the body from the front/back, comparing side-to-side, start from the ground up.*

- Ankles
- Knees
- Hips – ASIS & PSIS
- Shoulders (Acromioclavicular Joint)
- Ears

# Structural Assessment and Dysfunction Analysis

**VIEWING THE BODY USING ANATOMICAL LANDMARKS**
*(Following the Instructor's lead, students will pair up and do a basic structural assessment on each other in a trade format.)*

2. **Vertical Lines –**
   *View the body from the side (right, then left), comparing front-to-back, from ground up.*

- Lateral malleolus of the fibula (ankle)
- Lateral side of the knee (mid-point)
- Greater trochanter of the femur (hip)
- Center of humerus head (shoulder)
- Ear

# Structural Assessment and Dysfunction Analysis

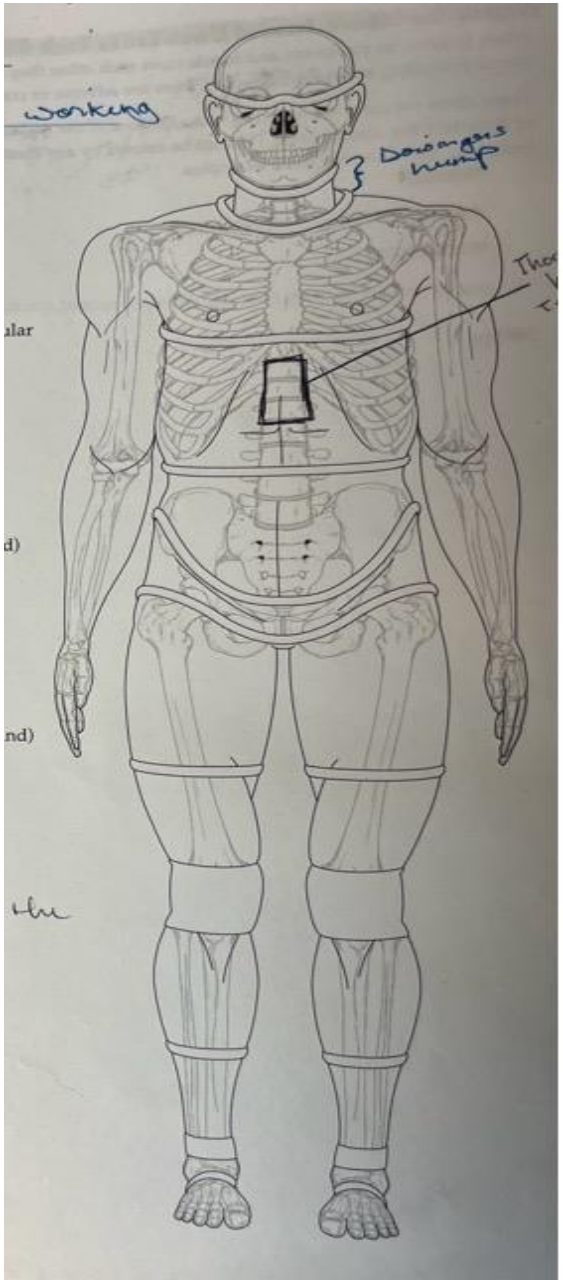
**VIEWING THE BODY USING ANATOMICAL LANDMARKS**
*(Following the Instructor's lead, students will pair up and do a basic structural assessment on each other in a trade format.)*

3. **Horizontal Fascial Lines –**
   *View the "body straps" – see diagrams on the next two slides.*

- Sphenobasilar - sphenoid & occiput (eye band)
- Craniocervical - Occiput & C1 (chin band)
- Cervicothoracic - C7 & T1 (collar/clavicular band)
- Dorsal Hinge - mid thoracic hinge at T6 (chest band)
- Thoracolumbar - T12 & L1 (belly/umbilical band)
- Sacrolumbar - L5 & S1 (inguinal band)
- Sacrococcygeal - S5 & coccyx (pubic band)

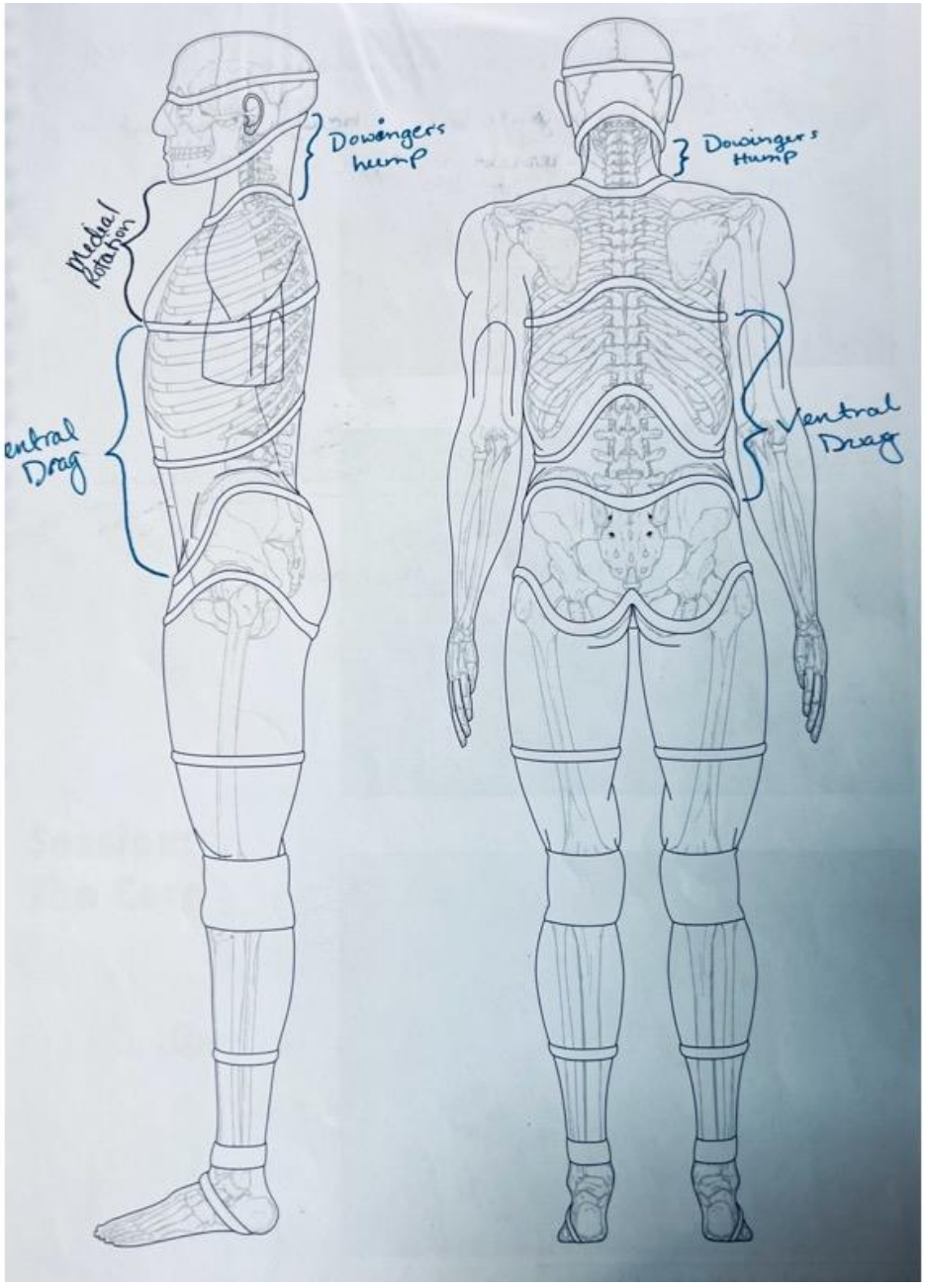
# Structural Assessment and Dysfunction Analysis

3. **Horizontal Fascial Lines –**
   *View the "body straps" –*



# Structural Assessment and Dysfunction Analysis

3. **Horizontal Fascial Lines –**
   *View the "body straps" –*



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