



**A 40-hour  
Palpatory Anatomy & Kinesiology  
Curriculum  
for**

**Trail Guide to the  
Body**  
3<sup>rd</sup> Edition

**Sample**

Created for Books of Discovery by  
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## Class #3 – Deltoid & Trapezius

Delt = delta + oid = form

### Objectives

Students Will:

- Integrate and utilize the concepts, principles, and terminology from previous classes
- Describe and perform movements of the shoulder complex associated with the deltoid and trapezius muscles utilizing proper anatomical and directional terminology
- Verbalize and understand the pronunciation and etymology of appropriate anatomical and directional terms
- Know the joint types, classifications, and movements of the glenohumeral (*g/h*), and scapulothoracic (*s/t*) joints
- Replicate and perform a recreational activity or an activity of daily living (ADL) that activates, shortens and lengthens the deltoid and trapezius muscles using the Functional Skills Model
- Know the attachment sites associated with the deltoid and trapezius
- Perform the various styles of palpation to locate muscle borders and attachment sites of the deltoid and trapezius
- Develop and refine skilled palpation incorporating anatomical structures, quality of touch, and effective client communication
- Describe the texture, shape, and fiber direction of the deltoid and trapezius muscles

### Class Equipment

Skeleton, Overhead or LCD Projector (Power Point), Resistance-Band (R-band)

### Readings

#### Required:

- *Trail Guide to the Body (TGB) 3<sup>rd</sup> Edition* Text Book: pgs. 54-62, 182, 224 (bones & landmarks) 65-67 (deltoid tuberosity); 69-78 (Deltoid & Trapezius muscles)
- **Reading for next class: pgs. 57-58, 61-62, 226, (bones & landmarks) 79-81 (Latissimus Dorsi, Teres Major)**

#### Supplemental:

- *TGB Instructors Field Guide*: pgs. 25-30

#### Homework:

- *TGB Student Handbook*: pgs. **28** (Qs. 2, 4-6, 10, 12, 15-17); **29** (Qs 5, 8, 12, 14-16); **39** (Qs. 1-6, 10-14). Continue pgs. **25-50** for classes 3-7 exercises relevant to class 3
- *TGB Flash Cards*: Volume 2 Muscle System deltoid and trapezius #s 6-7  
Volume 1 Skeletal System #s 70-75
- *TGB DVD*: Preview deltoid and trapezius palpation before class
- *TGB Audio file*: deltoid & trapezius

#### Multi Media Aids:

- *TGB Power Point*: Slides – Chapter 2, Shoulder and Arm #s 1-39
- *TGB Overheads*: Overheads – as per instructor design

## Class Outline

**5 minutes** – Attendance and address any questions from previous class

## LECTURE

**25 minutes** – Using *TGB Power Point* or *TGB Overheads*, skeleton, and R-band

### Bones and Bony Landmarks

**Scapula** - Superior & inferior angle, medial & lateral border, acromion, spine of scapula, glenoid fossa

**Humerus** - Head, deltoid tuberosity

**Clavicle** - Acromial & sternal ends

**Additional** - External occipital protuberance, superior nuchal line, ligamentum nuchae, spinous processes of vertebrae

### Joint Structure and Function

**Glenohumeral (g/h)** - *Classification*: Diarthrotic synovial; *Type*: Ball & Socket; *Articulation*: glenoid fossa with head of humerus; Allows Multi-plane movements in all planes

**Scapulothoracic (s/t)** - False joint, Scapula articulates with thorax

**Demonstration and participation** - AROM of *g/h* and *s/t* joints with an emphasis on planes of movement; Students stand and do movements with instructor

### Muscles

**Deltoid** - Convergent with three segments; anterior, lateral, and posterior

**Trapezius** - Divided into three groups: upper, middle, and lower fibers

## KINESIOLOGY

**20 minutes** – Functional Skills Model (R-band), Instructor Demonstrates movements while students follow lead of instructor; repeat each movement 2 times for each muscle

**Muscle actions/functions and palpation (AROM)** - Functional Skills with R-band, manual resistance, and/or gravity with partner participation

Both partners note agonist, antagonist, and synergist relationships

**Partner A** performs Primary Action (concentric) > Hold (isometric) > Slow return

(eccentric) contraction of *Deltoid* and *Trapezius* while focusing on body alignment, and kinesthetic awareness.

**Partner B** palpates muscles of partner A during activation, noting muscle location, size, shape, and borders.

**Massage Therapist Self Care Stretch (optional as per instructor)**

Students self stretch *upper trapezius* muscle using R-Band

**Switch partners and repeat**

**10 minutes – Break**

## **PALPATION**

**15 min – Instructor Demonstration using skeleton and student model**

**Students use *TGB Text* or *Flash Cards***

Bones and landmarks; Muscle origin, insertion, borders, bellies, and tendons  
Client positioning; Pincer, flat and strumming palpation types  
Isometric or concentric muscle contraction for identification  
Emphasize quality touch and communication

**Model Sitting or Standing - Identify and Palpate**

Clavicle, scapula, humerus and general outline of deltoid and trapezius

**Model Prone or Sitting - Identify and Palpate**

**Bones & Landmarks:** Spine of scapula, medial border of scapula, inferior and superior angles, lateral border, acromion, deltoid tuberosity, spinous processes C7-T12, External occipital protuberance

**Deltoids** (pg 75-76): Pincer, flat, and strumming palpation with muscle in shortened (shoulder flexed) and lengthened (arm at side of body) positions, identify *posterior* and *middle* fibers using resisted abduction to activate

**Trapezius** (pg 77-78): *Upper fibers*: pincer, flat, and strumming palpation of belly and attachments using neck extension to activate; *Middle fibers*: flat and strumming palpation with scapular adduction to activate; *Lower fibers*: flat, strumming and pincer palpation with scapular depression or “superman” pose for activation

**Model Supine**

**Upper trapezius:** Pincer palpation

**Deltoid:** *Anterior* and *Middle fibers* of deltoids, deltoid tuberosity

**PROM:** Shoulder girdle and passive stretch of upper trapezius

**20 min – Group 1 student practice & Palpation Station Worksheet**

Identify and palpate deltoids and trapezius as per instructor demonstration and/or *TGB Text*, *Flashcards*, or *DVD* and complete palpation station worksheet

**20 min – Group 2 student practice & Palpation Station Worksheet**

**5 min – Classroom closure and cleanup**