Chapter 6:
Anatomy and Physiology
The Muscular System -
Muscles of the HEAD

Muscles
- Body system that covers, shapes, and supports the entire skeletal tissue
- The muscular system contracts, which helps moves bones within your body for movement
- Myology - study of structure, function, and disease of the muscle

Muscle Composition
- The human body has over 600 muscles which make up about 40% of your body weight
- Three types of Muscle Tissue
  - Striated (Skeletal) – attached to bones; creates heat & energy for body during contractions, helps with body posture, and protects internal organs
  - Nonstriated (Smooth) – function automatically without thought; found within internal organs
  - Cardiac – found within heart and nowhere else
The muscle has three separate parts

- **ORIGIN** – part that does not move and attaches to skeleton
- **INSERTION** – part that moves slightly at the attachment of the skeleton
- **BELLY** – middle of the muscle connecting the immovable to the movable

Muscles of the HEAD

- Cos students are concerned with the VOLUNTARY muscles, meaning the ones you consciously control, such as the arms, hands, lower legs, and feet.
- **Muscles of the SCALP**
  - **EPICRANIUS** (occipito-frontalis) – broad muscle that covers the top of the scalp
  - **OCCIPITALIS** – back of the epicranius, draws the scalp backward
  - **FRONTALIS** – anterior (front) of the epicranius, raises the eyebrows, draws scalp forward, and causes wrinkles in the forehead
  - **EPICRANIAL APONEUROSIS** – tendon that connects the occipitalis and frontalis
Muscles of the EAR –
- no function but some people can contract them to wriggle their ears
- AURICULARIS SUPERIOR – muscle above the ear that draws it upward when contracted
- AURICULARIS ANTERIOR – muscle in front of the ear that draws the ear forward
- AURICULARIS POSTERIOR – muscle behind the ear that draws the ear backward

http://www.wonderquest.com/ears-wiggle.htm

Muscles of MASTICATION (Chewing)
- MASSETER – powerful muscle that closes the jaw
- TEMPORALIS – much less powerful muscle opens the jaw

http://www.clinicalexams.co.uk/musculoskeletal-system.asp

Muscles of the NECK
- PLATYSMA - broad muscle from the chest to the shoulder muscles to the side of the chin; lowers the jaw and lip
- STERNOCLEIDOMASTOIDEUS – muscle of the neck that lowers and rotates the head


Muscles of the EYEBROW
- CORRUGATOR – located beneath the frontalis and orbicularis oculi that draws the eyebrow down and wrinkles the forehead vertically
- ORBICULARIS OCULI – ring muscle of the eye sockets; enables the closing of the eyes

http://bjo.bmj.com/content/82/5/528.abstract

http://bjo.bmj.com/content/82/5/528.abstra ct
Muscles of the NOSE

– PROCERUS – covers the bridge of the nose, helps lower your eyebrows and causes the wrinkles on your nose

http://lyricdigger.info/s/muscles%20of%20nose

Muscles of the MOUTH (1 of 2)

– BUCCINATOR – thin flat muscle of the cheek between the upper and lower jaw that compresses the cheeks and expels air between the lips
– DEPRESSOR LABII INFERIORIS – surrounds the lower lip; lowers the lower lip and draws it to one side as in expressing sarcasm
– LEVATOR ANGULI ORIS – (Caninus) raises the angle of the mouth and draws it inward
– LEVATOR LABII SUPERIORIS – (Quadratus) muscle surrounding the upper lip; elevates the upper lip & dilates the nostrils (distaste)

Muscles of the MOUTH (2 of 2)

– MENTALIS – elevates the lower lip and raises/wrinkles the skin of the chin
– ORBICULARIS ORIS – flat band around the lips that compresses, contracts, puckers, and wrinkles the lips
– RISORIUS – draws the corners of the mouth out and back as in grinning
– TRIANGULARIS – muscle extending alongside the chin that pulls down the corner of the mouth
– ZYGOMATICUS (major & minor) – muscles extending from zygomatic bones to angle the mouth; elevates lip like when laughing

http://www.yorku.ca/earmstro/journey/facial.html