Human Anatomy and Physiology I Lab Omission Sheets

Textbook: Marieb EN, Mitchell SJ. 2008. Human Anatomy and Physiology Laboratory Manual, 9th ed.

These sheets are general guidelines concerning what will be and what will not be covered in the lab. They are not a substitute for lab attendance nor for active participation in the lab.

Exercise 1: Language of Anatomy

Read the entire exercise.
Omit the following:
- Activity 3: Observing Sectioned Specimens (page 6)
- "Serous Membranes of the Ventral Body Cavity" (pages 6-7)
- Activity 4: Identifying Organs in the Abdominopelvic Cavity (page 7)

Exercise 2: Organ Systems Overview

Read pages 15-16
Omit all activities
omit pages 17-24

Exercise 4: The Cell: Anatomy and Division

Read pages 39-44 only
Omit Cell Division: Mitosis and Cytokinesis (pages 45-48)

Exercise 6A: Classification of Tissues

Read the entire exercise
Omit Mesenchyme

Exercise 7: The Integumentary System

Read pages 91-98
Omit the following:
- Figure 7.5: Structure of a hair and hair follicle
- Figure 7.8: Main types of fingerprint patterns
- Figure 7.9: Method of inking the thumb and index finger
- Activity 3: Comparison of Hairy and Relatively Hair-free Skin Microscopically
- Activity 4: Differentiating sebaceous and sweat glands microscopically
- Activity 5: Plotting the distribution of sweat glands
- Dermography: Fingerprinting section on p. 99
- Activity 6: Taking and identifying inked fingerprints

Exercise 8: Classification of Covering and Lining Membranes

Read entire exercise
omit all activities

Exercise 9: Overview of the Skeleton: Classification and Structures of Bones and Cartilages

Read entire exercise (including the text corresponding to omitted activities and figures)
Omit all activities
Omit:
Figure 9.2: The structure of the long bone
Figure 9.4: Endochondral ossification in a developing long bone

Exercise 10: The Axial Skeleton

Read the entire exercise
Omit the following:
Figures 10.2, 10.3, 10.4, 10.5, 10.6(c), and 10.9
Location of the sutures on the skull
Regions of temporal bone (squamous, tympanic, mastoid, petrous)
Meningitis
Stylomastoid foramen
Internal acoustic meatus
Foramen lacerum
Hypoglassal canal
External occipital crest and protuberance
Sphenoid bone
Ethmoid bone
Mandibular body
Mandibular ramus
Mandibular angle
Mandibular foramen
Incisive fossa
Inferior nasal conchae (turninates)
Paranasal Sinuses
Vertebral arch
Superior and inferior articular processes
Intervertebral foramina
Coastal facets
Sacral hiatus
Sacral promontory
Jugular notch
Sternal angle
Xiphisternal join

Exercise 11: The Appendicular Skeleton

Read the entire exercise
Know the right and left of the following bones:
Humerus
Femur
Tibia

Pelvic Girdle
Omit the following from the humerus:
Greater and lesser tubercle
Deltoid tuberosity
Radial groove
Radial fossa
Omit the following from the coxal bone:
Auricular surface
Sacroiliac joint
Anterior/posterior superior spine
Arcuate line
Lesser and greater sciatic notches
Rami of the pubis
Omit the following from the Femur:
Intertrochoanteric crest and line
Gluteal tuberosity
Linea aspera
Patellar surface
Intercondylar fossa
Adductor tubercle
Omit the following from the Tibia:
Intercondylar eminence
Anterior border
Know only the following on the hand and foot:
Carpals, metacarpals, phalanges
Tarsals, metatarsals, phalanges

Exercise 13: Articulations and Body Movements

Read pages 169-177
Omit all activities
Know these joints/bones:
Skull
Atlantoaxial
Intervertebral (both)
Sternoclavicular
Radioulnar (both)
Pubic Symphysis
Coxal
Tibiofermoral

Exercise 14: Microscopic Anatomy and Organization of Skeletal Muscle

Read entire exercise
Omit all activities

Exercise 15: Gross Anatomy of the Muscular System

Responsible for the identification ONLY of the following muscles:

Head/Neck

1. orbicularis oris
2. orbicularis oculi
3. mentalis
4. platysma
5. temporalis
6. masseter
7. trapezius
8. myohyoid
9. omohyoid superior belly
10. omohyoid inferior belly
11. sternohyoid
12. sternocleidomastoid
13. digastric
14. sternothyroid

Thorax:

1. deltoid
2. pectoralis minor
3. pectoralis minor
4. transversus abdominis
5. internal oblique
6. external oblique
7. rectus abdominis
8. rhomboid minor
9. rhomboid major
10. teres major
11. latissimus dorsi
12. levator scapulae
13. supraspinatus
14. infraspinatus

Arm:

1. triceps brachii
2. biceps brachii
3. brachialis
4. brachioradialis
5. pronator teres
6. flexor carpi radialis
7. Palmaris longus
8. flexor carpi
9. flexor digitorum profundus
10. extensor carpi ulnaris
11. extensor carpi radialis longus
12. extensor carpi radialis brevis
13. extensor digitorum

Leg:

1. sartoris

quadriceps femoris

2. rectus femoris
3. vastus lateralis
4. vastus intermedius
5. vastus medials
6. gracilis
7. gluteus maximus
8. semitendinosus
9. semimembranousus
10. gastrocnemius
11. fibularis longus
12. extensor digitorum longus
13. fibularis brevis

Exercise 16A: Skeletal Muscle Physiology

Read pages 235-236, 241-242
Omit all activities

Exercise 17: Nervous Tissue

Read the entire exercise

Exercise 19: Nervous Tissue

Read the entire exercise

Omit the following figures:

- Figure 19.1: Embryonic development of the human brain
- Figure 19.5: Basal Ganglia
- Figure 19.6: Cerebellum
- Figure 19.7: Meniges
- Figure 19. 8: Location and circulatory pattern of cerebrospinal fluid

Omit the following terms:

- Cerebral peduncles
- Decussation of pyramids
- Superior colliculi
- Inferior colliculi
- Caudate nucleus
- Lentiform nucleus
- Putamen
- Globus pallidus nuclei
- Coronoa radiate
- Internal capsule
- Corpus striatum
- Interthalamic adhesion
- Intermediate mass
- Interventricular foramen
- Infundiubulum
- Epithalamus
- Pineal body
- Choroid plexus
- Vermis
- All terms related to the meninges
- Hydrocephalus

Know all 12 cranial nerves by name, location, and function (Table 19.1)

Exercise 21: Spinal Cord, Spinal Nerves, and the Autonomic Nervous System

Read pages 315-326

Omit activity 2: identifying spinal cord tracts

Omit all tables

Exercise 22: Human Reflex Physiology

Read pages 341-347

Omit activities 4-10

Exercise 23: General Sensation

Read the entire exercise

Omit activities 1, 4, 6, and 7

Exercise 24: Special Senses: Vision

Read the entire exercise

Omit the following terms on Figure 24.1: External anatomy of the eye and accessory structures:

- Levator palpebrae superioris muscle
- Tarsal plate
- Palpebral conjunctive
- Tarsal glands
- Palpebral fissure
- Conjunctival sac
- Medial canthus
- Excretory ducts of lacrimal gland
- Lacrimal punctum
- Lacrimal sac
- Inferior meatus of nasal cavity
- Nostril

Omit column 3 (cranial nerves) of (c) of Figure 24.2: Extrinsic muscles of the eye

Omit the following terms from Figure 24.3: Sagittal section of the internal anatomy of the eye:

- Ora serrata retinae
- Sclera venous sinus

Omit Figure 24.4: Microscopic anatomy of the cellular layers of the retina

Omit Figure 24.8: Refraction of light in the eye. resulting in the production of a real image on the retina

Omit Figure 24.13: Posterior portion of right retina

Omit activities 1, 3, and 6-12

Do activity 2: dissection of sheep eye

Exercise 25: Special Senses: Hearing and Equilibrium

Read the entire exercise

Omit the following Figures:

- Figure 25.3: Anatomy of the cochlea
- Figure 25.4: Microscopic view of the organ of Corti
- Figure 25.5: Resonance of the basilar membrane
- Figure 25.8: The effect of gravitational pull on a macula receptor in the utricle

Omit activities 2-7

Exercise 26: Special Senses: Olfaction and Taste

Read pages 397-399

Omit all activities