Lab Exam 1 Objectives

Directional Terms

Anterior	Posterior
Ventral	Dorsal
Inferior	Superior
Lateral	Medial
Proximal	Distal
Deep	Superficial

Body Planes

Frontal (coronal) section
Sagittal section
Midsagittal section
Transverse section

Body Cavities and Associated Structures

Dorsal Cavity
Cranial cavity
Vertebral (spinal) cavity (canal)
Ventral Cavity
Abdominal cavity
Abdominopelvic cavity
Diaphragm
Pelvic cavity
Thoracic cavity

Abdominal Regions

Right Hypochondriac Region	**Epigastric Region**	**Left Hypochondriac Region**
Gallbladder	Pancreas	Stomach Spleen
Right Lumbar/Flank Region	**Umbilical Region**	**Left Lumbar/Flank Region**
Right kidney	Small intestine	Left kidney
Right Iliac/Inguinal Region	**Hypogastric/Pubic Region**	**Left Iliac/Inguinal Region**
Appendix Right ovary	Urinary bladder Uterus	Left ovary

Lab Exam 1 Objectives

Serous Membranes and Associated Structures

Parietal pericardium	Parietal peritoneum
Visceral pericardium (epicardium)	Visceral peritoneum
Pericardial cavity	Peritoneal cavity
Parietal pleura	Retroperitoneal region (space)
Visceral pleura	
Pleural cavity	

Appendicular Skeleton

Upper Extremity – Bones and Markings

Clavicle	Radius
Carpals	Head of radius
Humerus	Radial tuberosity
Capitulum	Styloid process (stylus) of radius
Coronoid fossa	Scapula
Deltoid tuberosity	Acromion process
Greater tubercle	Axillary (lateral) margin of scapula
Head of humerus	Coracoid process
Lateral epicondyle	Glenoid cavity
Lesser tubercle	Spine of scapula (scapular spine)
Medial epicondyle	Vertebral (medial) margin of scapula
Olecranon fossa	Ulna
Trochlea	Coronoid process
Metacarpals	Head of ulna
Phalanges	Olecranon process
	Radial notch
	Styloid process (stylus) of ulna

Lab Exam 1 Objectives

Lower Extremity – Bones and Markings

Os Coxa ((pl. coxae)	Femur
Ilium	Greater trochanter
Anterior inferior iliac spine/process	Head of femur
Anterior superior iliac spine/process	Lateral condyle of femur
Iliac crest	Lesser trochanter
Posterior inferior iliac spine/process	Medial condyle of femur
Posterior superior iliac spine/process	Fibula
Greater sciatic notch	Head of fibula
Ischium	Lateral malleolus
Ischial spine	Metatarsals
Ischial tuberosity	Patella
Pubis	Phalanges
Acetabulum	Tarsals
Obturator foramen	Calcaneus
Coccyx	Talus
Sacrum	Tibia
Sacroiliac joint	Lateral condyle of tibia
Sacrum to ilium articulating surface	Medial condyle of tibia
Symphysis pubis	Medial malleolus
	Tibial tuberosity

Axial Skeleton

Thorax & Hyoid

Clavicle	Rib cage
Hyoid	Costal cartilage
Sternum	Vertebral (false, floating) ribs
Body of sternum	Vertebrochondral (false) ribs
Manubrium of sternum	Vertebrosternal (true) ribs
Xiphoid process of sternum	

Lab Exam 1 Objectives

Vertebral Column (note: boldface headings are NOT objectives)

Atlas	**Vertebral markings**
Axis	Body of vertebra
Odontoid process (dens)	Intervertebral disk
Coccyx	Intervertebral foramen
Sacrum	Lamina
Vertebra (pl. vertebrae)	Pedicle
Cervical	Spinal (vertebral) foramen (pl. foramina)
Thoracic	Spinous process of vertebra
Lumbar	Transverse foramen (pl. foramina)
	Transverse process

Skull (note: boldface headings are NOT objectives)

Foramen magnum	Parietal bone
Frontal bone	Sphenoid bone
Frontal sinus	Greater wing of sphenoid
Ethmoid bone	Orbital surface of sphenoid
Cribriform plate	Sella turcica
Crista galli	Sphenoidal sinus
Middle nasal concha (pl. conchae)	Temporal bone
Perpendicular plate of ethmoid	External acoustic meatus
Superior nasal conchae	Mandibular (glenoid) fossa
Inferior nasal concha (pl. conchae)	Mastoid process
Lacrimal bone	Styloid process
Mandible	Zygomatic process of temporal bone
Mandibular condyle	Vomer bone
Maxilla	Zygomatic bone
Maxillary sinus	**Sutures**
Median palatine suture	Coronal suture
Palatine process of maxilla	Lambdoidal suture
Nasal bone	Sagittal suture
Occipital bone	Squamosal suture
Occipital condyle	
Palatine bone	

Lab Exam 1 Objectives

Skeletal Muscles

Histology – Muscle Tissue

On a slide of muscle tissue identify the following muscle types as well as the nucleus of each:

Smooth muscle	Skeletal muscle
Cardiac muscle	Nucleus of muscle cell (fiber)

Muscles of the Face and Neck

Buccinator	Sternocleidomastoid
Masseter	Temporalis
Platysma	

Muscles of the Chest and Back

External intercostal	Pectoralis minor
Internal intercostal	Rhomboid major
Latissimus dorsi	Serratus anterior
Pectoralis major	Trapezius

Muscles of the Shoulder

Coracobrachialis	Supraspinatus
Deltoid	Teres major
Infraspinatus	Teres minor
Subscapularis	

Muscles of the Upper Limb

Biceps brachii	Pronator teres
Brachialis	Triceps brachii
Brachioradialis	

Muscles of the Abdomen

External oblique	Rectus abdominis
Internal oblique	Transverse abdominis

Lab Exam 1 Objectives

Muscles of the Pelvis, Buttocks and Lower Limb

Adductor longus	Psoas major
Adductor magnus	Rectus femoris
Biceps femoris	Sartorius
Calcaneal (Achilles) tendon	Semimembranosus
Extensor digitorum longus	Semitendinosus
Gastrocnemius	Soleus
Gluteus maximus	Tibialis anterior
Gluteus medius	Vastus intermedius
Gracilis	Vastus lateralis
Iliacus	Vastus medialis
Iliopsoas	

Diffusion & Osmosis

Demonstration procedure of the processes of diffusion and osmosis

Integument

Arrector pili muscle	Hair
Dermal papilla	Hypodermis (subcutaneous layer)
Dermis	Sebaceous gland
Epidermis	Sudoriferous (sweat) gland

Histology - Bone Tissue

On a slide or model of bone tissue identify the following structures:

Canaliculus (pl. canaliculi)	Lamella (pl. lamellae)
Central (osteonic) canal	Osteocyte
Compact bone	Osteon
Lacuna (pl. lacunae)	

Long Bone Structure

Articular cartilage	Epiphysis
Compact bone tissue	Medullary cavity
Diaphysis	Periosteum
Endosteum	Spongy (cancellous) bone