Human Anatomy and Physiology- I

BIOL2401- **Lab Practical 2** Terminology

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| Lab 12: Structure & Classification of Bone | | | |  |  | |
| **Microscopic Structure** | | **Sectioned Long Bone** | |  |  | |
| Osteon (Haversian) System | |  | epiphysis | periosteum | | |
|  | central (Haversian) canal |  | diaphysis | Sharpey's fibers | | |
|  | perforating (Volkmann’s) canal |  | epiphyseal line (disk or plate) | medullary cavity | | |
|  | osteocyte |  | compact (dense) bone |  | | red marrow |
|  | lacuna |  | spongy (cancellous) bone |  | | yellow marrow |
|  | canaliculi |  | hyaline (articulating) cartilage |  | | endosteum |
|  | trabeculae |  |  |  | |  |

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| Lab 13: Organization of the Skeleton |
| Axial skeleton vs. Appendicular skeleton |
| Differentiate between left and right |

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| **Lab 14: The Skull** | | | | | | | | | | | |  |  | | | |
| Cranium | | | | | | | | | | |  | |  |  |  |  |
|  | Frontal bone | | | Temporal bone (2) | | | Sphenoid bone | | | | | | | | | |
|  |  | frontal sinus | |  | squamosal suture | |  | | sella turcica | | | | | | | |
|  |  | supraorbital foramen | |  | external acoustic meatus | |  | | sphenoid sinus | | | | | | | |
|  |  |  | |  | internal acoustic meatus | |  | | optic canal | | | | | | | |
|  |  |  | |  | mastoid process | |  | | lateral pterygoid plate | | | | | | | |
|  | Parietal bone (2) | | |  | styloid process | |  | | medial pterygoid plate | | | | | | | |
|  |  | sagittal suture | |  | carotid canal | |  | |  | | | | | | | |
|  |  | coronal suture | |  | jugular foramen | |  | |  | | | | | | | |
|  | Occipital bone | | |  |  | |  | |  | | | | | | | |
|  |  | lambdoidal suture | |  |  | | Ethmoid bone | | | | | | | | | |
|  |  | foramen magnum | |  |  |  |  | crista galli | | | | | | | | |
|  |  | occipital condyles | |  |  |  |  | cribriform plate | | | | | | | | |
|  |  |  | |  |  |  |  | perpendicular plate | | | | | | | | |
|  | sutural bone | | |  |  |  |  | ethmoid sinus | | | | | | | | |
|  |  | |  |  |  |  |  | nasal concha | | | | | | | | |
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| Facial bones | | |  |  |  |
|  | Maxillary bones | | Inferior nasal concha | | |
|  |  | maxillary sinus | Mandible | |  |
|  |  | palantine process |  | body | |
|  |  | alveolar fossa\* |  | ramus | |
|  |  |  |  | mandibular condyle | |
|  | Palatine bone | |  | coronoid process | |
|  | Zygomatic bone | |  | mental foramen | |
|  |  |  |  | alveolar fossa\* | |
|  |  | zygomatic arch |  |  | |
|  | Lacrimal bone | | Hyoid |  | |
|  | Nasal bone | |  |  | |
|  | Vomer bone | |  | | |

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| Lab 15: Vertebral Column & Thoracic Cage | |
| Parts of vertebrae | Costal (rib) (12 pairs) |
| body | types |
| spinous process | true (vertebrosternal) 7 pair |
| vertebral foramen | false (vertebrochondral) 5 pair |
| transverse process | floating (vertebral) last 2 pair of 5 |
| intervertebral disc | intercostal space\* |
| intervertebral foramen | Sternum |
|  | manubrium |
|  | sternal notch |
|  | sternal angle |
| Cervical vertebrae (7) | body |
| transverse foramen | xiphoid process |
| bifid process |  |
| Atlas (1st) |  |
| Axis (2nd) |  |
| dens (odontoid process) |  |
| Thoracic vertebrae (12) |  |
| costal facets |  |
| Lumbar vertebrae (5) |  |
| Sacrum (5 fused) |  |
| sacral foramen |  |
| articular surface (sacroiliac joint) |  |
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| Lab 16: Pectoral Girdle & Upper Limb | | | | | | | | | | | | | | | | | |
| Pectoral Girdle | | | | Upper Arm | | | |  | | |  | | | |  |  | |
|  | clavicle | | |  | Humerus | | | | | | Ulna | | | | | | |
|  | scapula | | |  |  | head | | | | |  | trochlear notch | | | | | |
|  |  | spine | |  |  | neck | | | | |  |  | | | | | |
|  |  | acromion process | |  |  | deltoid tuberosity | | |  | olecranon process | | | | | | |
|  |  | coracoid process | |  |  | capitulum | | | | |  | coronoid process | | | | | |
|  |  | glenoid cavity | |  |  | trochlea | | | | |  | styloid process | | | | | |
|  |  | supraspinous fossa | |  |  | coronoid fossa | | | | |  | head | | | | | |
|  |  | infraspinous fossa | |  |  | olecranon fossa | | | | | Carpals (8) | | | | | | |
|  |  | subscapular fossa\* | |  |  |  | | | | | Manus (hand) | | | | | | |
|  |  |  | |  | Radius | | | | | |  | metacarpals (1🡪5) | | | | | |
|  |  |  | |  |  | head | | | | |  | phalanges (1🡪5) | | | | | |
|  |  |  | |  |  | styloid process | | | | |  |  | proximal | | | | |
|  |  |  | |  |  |  | | | | |  |  | medial | | | | |
|  |  |  | |  |  | | | | | |  |  | distal | | | | |
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| Lab 17: Pelvic Girdle & Lower Limb | | | | | | | | | | | | | | | | | | |  | patella |
| Coxal (hip) bone | | | Femur  head | | | | Tibia | | | | | | | tarsals (7) | | | | |
| ilium | | | fovea capitis | | | | medial condyles | | | | | | | talus | | | | |
| iliac crest | | | neck | | | | lateral condyles | | | | | | | calcaneus | | | | |
| iliac fossa | | | gluteal tuberosity | | | | tibial tuberosity | | | | | | | metatarsals (15) | | | | |
| greater sciatic notch | | | medial condyle | | | | medial malleolus | | | | | | | phalanges (15) | | | | |
| ischium | | | lateral condyle | | | |  | | | | | | | proximal | | | | |
| ischial tuberosity | | | intercondylar fossa | | | | Fibula | | | | | | | medial | | | | |
| ischial spine | | | patellar surface | | | | head | | | | | | | distal | | | | |
| lesser sciatic notch | | |  | | | | lateral malleolus | | | | | | |  | | | | |
| pubis | | | Patella | | | |  | | | | | | |  | | | | |
| pubic symphysis | | |  | | | |  | | | | | | |  | | | | |
| acetabulum | | |  | | | |  | | | | | | |  | | | | |
| obturator foramen | | |  | | | |  | | | | | | |  | | | | |
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**Know the difference between Male and Female pelvic girdles**