Human Anatomy & Physiology I  
Lab 6 Overview of bones & the axial skeleton

**Lab exercises 6.1**  
The instructor will provide you with several bones from the human body. For each one, identify which shape category it belongs to and give the reasons why it belongs to that category.

<table>
<thead>
<tr>
<th>Bone</th>
<th>Shape category</th>
<th>Reasons for categorization</th>
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<tbody>
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**Lab exercises 6.2**

The instructor will provide you with a plastic model of enlarged bone tissue. Find all the following items in the model and be prepared to point out any three to the instructor on their request.

- compact bone
- spongy bone
- lacuna
- canaliculum
- central canal
- perforating canal
- lamella
- circumferential lamella
- trabecular
- periosteum
- endosteum
- bone marrow

**Lab exercises 6.3**

The instructor will provide you with several bones from the human body. Using the bones provided, put the appropriate numbered sicker on a bone marking that fits into each of the following categories.

1. Tubercle
2. Condyle
3. Epicondyle
4. Head
5. Neck
6. Ramus
7. Trochanter
8. Spine
9. Crest
10. Meatus
11. Foramen
12. Fissure.
Lab exercises 6.4

The instructor will provide you with a model of the human skull. One the model and on the diagrams below, be able to label all the following bones, processes, and foramina:

- **Bones**
  - B1 – frontal
  - B2 – parietal
  - B3 – occipital
  - B4 – temporal
  - B5 – sphenoid
  - B6 – ethmoid
  - B7 – lacrimal
  - B8 – nasal
  - B9 – maxilla
  - B10 – zygomatic
  - B11 – mandible
  - B12 – vomer
  - B13 – palatine

- **Sutures**
  - S1 – coronal
  - S2 – squamous
  - S3 – lambdoid

- **Foramina**
  - F1 – supraorbital
  - F2 – infraorbital
  - F3 – mental

- **Processes**
  - P1 – mastoid
  - P2 – styloid
  - P3 – zygomatic
  - P4 – temporal

![Unlabeled skull for labeling.](image)

Lab exercises 6.5

1. The instructor will provide you with either real or replica vertebrae bones. Identify which in your group are the atlas, axis, cervical vertebrae, thoracic vertebrae, and lumbar vertebrae.

2. Stack your vertebrae in the correct order and in the correct orientation.