Bio 135 Lab: Bones lab one. Axial Skeleton:

* Objectives:
  + Learn the surface marking terminology
  + Apply this terminology to bony structures
  + Identify the bones of the axial skeleton and the related surface markings
* Pre-Lab activities:
  + Go to virtual lab and review materials on the Skeletal system.
  + Review the Axial bones study list at the end of this document. Learn these bones and markings by visually comparing them to images in your text and online.
* Related in lab activities:
  + Brief lecture on bones of the Axial Skeleton
    - Review slide of microscopic structure of bone and identify structures
  + Exercise
    - View the bones in class that are listed below. Learn to visually identify these bones. And related structures, on the virtual lab and the images in your text.
    - B able to identify the structures of the skull as listed.

**Bio 135**

**Bones and Markings of the Axial Skeleton**

**The Skull**

1. **Frontal bone**

2. **Parietal bone**

3. **Occipital bone**

19. occipital condyles

69. foramen magnum

4. **Temporal bone**

5. mastoid process

8. mandibular fossa

9. styloid process

30. zygomatic arch

42. external auditory meatus

11. **Zygomatic bone**

12. **Nasal bone**

13. **Maxilla**

14. **Lacrimal bone**

15. **Ethmoid bone**

58. crista galli

59. cribriform plate

16. **Vomer**

17. **Palatine bone**

10. **Sphenoid bone**

63. sella turcica

20. **Mandible**

52. mental foramen

21. coronoid process

22. mandibular condyle

**The Hyoid Bone**

**The Vertebral Column**

**Cervical vertebrae (7)**

body

spinous process

transverse process

transverse foramen

vertebral foramen

**Atlas**

**Axis**

dens

**Thoracic vertebrae (12)**

body

spinous process

transverse process

vertebral foramen

**Lumbar vertebrae (5)**

body

spinous process

transverse process

vertebral foramen

**Sacrum**

body

sacral hiatus

superior sacral canal

sacral foramina

**Coccyx**

**The Thoracic Cage**

**Sternum**

body

manubrium

clavicular notch

jugular notch

xiphoid process

**Ribs**

**true ribs** (7 pairs)

**false ribs** (5 pairs)

**floating ribs** (2 pairs)