

REVIEW & STUDY GUIDE – FINAL EXAM

The final exam for this class is scheduled for **Friday, December 16th at 8:00 a.m. PLEASE DO NOT ARRIVE LATE TO THE EXAM!**

Most of the material on the exam comes from the lab exercises (including the lab cover sheets) and the lab readings from the class webpage.

- Be able to arrange the various hominid species below in their evolutionary order. This requires you to know which hominid species is oldest and which is most recent – you don't need to know exact dates, just have a sense of chronological order. (Reading Handout – Early Hominids, Evolution of Genus Homo; Labs – Early Ancestors; Evolution of the Genus Homo; Bones of Contention; Video – In Search of Human Origins; Hominid Review handout from webpage)

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|--------------|-----------|---------------|--------------|--------------|--------------|
| Homo erectus | P. boisei | Au. afarensis | Homo habilis | Neanderthals | Homo sapiens |
| | | Au. africanus | P. robustus | | |

- What is the ONE feature that separates Hominids from other primates? If you only had a skull to look at, how would you determine if the specimen is Hominid or not? (Pre-Lab discussion 11/18)
- What **specific** anatomical features are important for determining bipedality? (Pre-lab discussion 11/18; Reading handout – Early Hominids; Video – In Search of Human Origins; Labs – Building Bodies)
- What are the advantages of being bipedal? (Lab - Building Bodies)
- Be able to distinguish between the skulls of the australopithecines and those that belong to the genus Homo, and discuss the major features that set them apart (Lab – Early Ancestors, Evolution of Genus Homo Lab; Bones of Contention Lab, Reading – Early Hominids)

NOTE: It's really important that you be descriptive in discussing these features. For example, if one difference is skull size, you need to do more than simply write that, you need to tell me if the skull is bigger, smaller, etc. and WHICH skull is bigger, smaller, etc.

- You should be able to distinguish between the skulls of the robust australopithecines and the other australopithecines as well as explain why they exhibit these unique characteristics (Lab – Early Ancestors; Reading – Early Hominids)
- You should know the differences in lifestyle/behavior between the australopithecine hominids and later hominids (those that belong to the Genus Homo), as well as the cultural innovations associated with each species of the hominids belonging to the genus Homo (Lab – Evolution of the Genus Homo; Lab – Bones of Contention; Hominid Review Lab & Reading – Origin & Evolution of Genus Homo).
- You should be able to distinguish between upper (arm) and lower (leg) limb bones and use proper anatomical terms to do so (Lab – Dem Bones; Osteology 101; Atlas of Skeletal Anatomy)
- What are the two main skeletal features used in determining the sex of a skeleton? (Lab – Dem Bones/Answer Sheet)

- What are the main anatomical features that distinguish the male pelvis from the female pelvis? (Lab – Dem Bones/Answer Sheet)
- What are the main anatomical features that distinguish the female skull from the male skull? (Lab – Dem Bones/Answer Sheet & comparative anatomy handout on webpage)
- Be able to identify and name (using correct anatomical terminology) the major parts of the skull (foramen magnum, sagittal crest/ridge, zygomatic arches, occipital region, etc.) and know the types of information that can be gleaned from analyzing cranial (and dental) features. (Labs – Dem Bones; Early Ancestors; Evolution of the Genus Homo; Bones of Contention; Reading – Early Hominids & Evolution of Genus Homo)
- What are the PHYSICAL and CULTURAL differences between Neanderthals and anatomically modern humans? (Lab – Bones of Contention; Video – In Search of Human Origins Episode 3)
- Why is the introduction and manufacture of stone tools considered to be an “evolutionary turning point” in early hominid evolution? How does this innovation affect hominid behavior and how is it reflected in changes to the crania and dentition of hominids belonging to the genus *Homo*? (Lab – Evolution of the Genus Homo; Reading – Origin & Evolution of the Genus Homo)
- Given a series of clues, you should be able to determine if the clue describes a chimp (a quadruped) or a biped (Lab – Building Bodies)
- From your lecture class and hominid lab exercises and readings, you should have a fairly good sense of the major hominid species (those listed in the box above). See also Hominid Review Sheet and Name That Hominid study aids posted to the class webpage.