General Directions

- Use ADAM to help learn the skeleton:
  - Instructions begin on p. 36
  - Atlas Anatomy and/or the Radiology slides in ADAM are also helpful
  - With “labels” on, you can use ADAM to learn the names of the whole bones first: a good starting point
- Study both the articulated skeleton and disarticulated bones (box of bones)
  - Use paintbrushes as pointers – no pens or pencils please!
- See the glossary on p. 37, and label the skeleton on p. 38. Use your textbook and atlas.
In addition...

Study (use textbook, atlas, x-rays, etc.):
- Fracture types
- Sutures of the skull
- Joints
  - 3 types, and features of a typical diarthrotic joint
- Young vs. “old” bones
- Sinuses

Models, Demos, & other Resources
- Osteon model
- Split femur (please be careful)
- X-rays
- Organic and Inorganic bone preparations
- Calf joint dissection (Thursday)
  - See figures on pp. 46 & 48, and handout on p. 47
X-rays...example

Please read the captions and answer the questions posted on each x-ray. Pay special attention to those normal and pathological features not visible in other study materials.

Fracture Types
Review Bone histology:

- **DEMO: Matrix of Bone**
  - **Inorganic Bone preparation**
    - Bones placed in furnace @ 700°C to burn off all organic molecules
    - Mostly mineral salts (calcium and phosphate)
    - “Calcium hydroxy apatite” makes bones rigid
  - **Organic bone preparation**
    - Bones soaked in dilute acetic acid (vinegar)
    - Only organic component of matrix remains
    - “Osteoid” gives bones flexibility
Thursday: Articulations (Joints)

- 3 types of Joints, classified by movement:
  - Synarthrotic
  - Amphiarthrotic
  - Diarthrotic
- Demonstration dissection of Calf Joint
  - bring p. 45 with you during demonstration
- Arthroscopy Video

Next Week

- Muscular System
- Introduction to Biomechanics (Levers)