Anatomy and Physiology 121: Joints and Articulations

Classification of Joints
1. Type of Connective Tissue
   a) Fibrous
   b) Cartilaginous
   c) Synovial

2. Degree of Movement
   a) Synarthrotic (non-movable, limited)
   b) Amphiarthrotic (movement good in one plane)
   c) Diarthrotic (highly moveable in all directions)

Tissue Classification:
Fibrous joints
- dense connective, little movement
- types
  a) Syndesmosis = interosseous ligament, amphiarthrotic
  b) Suture = sutural ligament, synarthrotic
  c) Gomphosis = periodontal ligament

Cartilaginous joints
- hyaline and fibrocartilage
- types
  a) Synchondrosis = epiphyseal disk
  b) Symphysis

Synovial joints
- most joints in body
- diarthrotic
- fluid filled capsule

Structure of a Synovial Joint
1. Joint Capsule (two layers)
   a) Outer Dense Fibrous Connective (ligaments)
   b) Inner Synovial Membrane

3. Articular Cartilage
4. Synovial Cavity and Synovial Fluid
5. Menisci
6. Bursa
Types of Synovial Joints:
- Ball and socket
- Condyloid
- Gliding
- Hinge
- Pivot
- Saddle

Types of Joint Movements:
- Flexion
- Extension
- Abduction
- Adduction
- Circumduction
- Rotation
- Supination
- Pronation

Other Movements:
- Hyperextension
- Dorsiflexion
- Plantar flexion
- Eversion
- Inversion
- Protraction
- Retraction
- Elevation
- Depression