

## Biology 204 Human Anatomy & Physiology

### I. Anatomy

#### A. Orientation

1. anatomical position
2. cadaver perspective
3. directional terms [**Table 1.1**]
  - a) superior/inferior
  - b) anterior/posterior
  - c) medial/lateral (intermediate)
  - d) proximal/distal
  - e) superficial/deep
4. regional terms [**study Fig. 1.5 in text**]

#### B. Planes & Sections

1. sagittal
  - a) median=mid-sagittal
  - b) parasagittal
2. frontal (coronal)
3. transverse (cross, or horizontal)
4. oblique (at an angle)
5. Hint: a large part of anatomy is learning to think in 3D, by translating 2D slices, or drawings into 3D objects

#### C. Body Cavities

1. dorsal
  - a) cranial
  - b) vertebral
2. ventral
  - a) thoracic
    - (1) pleural
    - (2) mediastinum
      - (a) pericardium
      - (b) esophagus, trachea, etc.
  - b) abdominopelvic (separated by diaphragm)
    - (1) abdominal
    - (2) pelvic

#### D. Membranes

1. serosa (peritoneum)
  - a) parietal
  - b) visceral
2. pericardium
  - a) parietal
  - b) visceral
3. pleura-ditto
4. inflammation-peritonitis, pleurisy- membranes rub together

#### E. Other Cavities

1. oral & digestive
2. nasal
3. orbital
4. middle ear
5. synovial

#### F. Abdominopelvic Regions

1. 9 regions:

R. hypochondriac	epigastric	L. hypochondriac
R. lumbar	umbilical	L. lumbar
R. inguinal	pubic	L. inguinal

- 2.
3. four quadrants
  - a) left/right
  - b) upper/lower

#### G. Terms

1. Latin and Greek
2. know your roots! **look at Appendix A**

#### H. Evolutionary & Developmental Histories

1. chordates are deuterostomes
  - a) radial cleavage
  - b) coelom formed by pocketing of mesoderm (1 of 3 tissue layers)
  - c) blastopore becomes anus
2. humans are chordates
  - a) pharyngeal gill slits
  - b) dorsal hollow nerve chord
  - c) notochord
  - d) post-anal tail
3. humans are segmented
  - a) ribs & spine
  - b) other places ("hidden")