**Bio 322 – Human Anatomy**

**Objective list for Exercises #2 and #4**

**Microscopy and Basic Histology**

1. **Exercise #2 – The microscope**
   1. **Understand the parts of the microscope**
   2. **Understand how to calculate magnification based on power of the ocular lens and the power of the objective lens**
2. **Exercise #4 – Histology of Various tissues. For this exercise, you’ll need to be able to identify the different CLASSES of tissues (i.e., simple squamous epithelium, loose areolar connective tissue), and NOT the organ that the tissue came from (i.e., lung, liver, etc..).**
   1. **Simple squamous – slide 2,3**
   2. **Simple cuboidal – slide 16 (kidney)**
   3. **Simple columnar – slide 26, 32**
   4. **Pseudostratified columnar – slide 7**
   5. **Stratified squamous – slide 9,18 (skin-epidermis)**
   6. **Transitional epithelium – slide 8**
   7. **Loose areolar C.T. – slide 10**
   8. **Adipose tissue – slide 18, also on slide 3 (may be better)**
   9. **Dense irregular CT – slide 18 (look in the dermis)**
   10. **Dense regular CT – slide 11**
   11. **Hyaline cartilage – slide 7**
   12. **Elastic cartilage – slide 38**
   13. **Fibrocartilage – slide 37**
   14. **Bone – slide 14**
   15. **Blood – slide 6 (be able to tell the difference between an erythrocyte and a leukocyte)**
   16. **Nervous tissue – slide 17 (know difference between a neuron and glial cell and also identify soma, dendrites, axons on a neuron)**
   17. **Skeletal muscle – slide 15**
   18. **Cardiac muscle – slide 1**
   19. **Smooth muscle – slide 26,32, also on slide 3 (middle layer of the wall of artery and vein)**