**Biology 322 : Urinary system anatomy (Exercise 27)**

**Gross anatomy of the urinary system:**

Using Figures 27.1, 27.2, 27.7 of your lab manual as well as the human torso models and plastic kidney models you should be able to identify:

* *Kidneys*
  + *Renal column*
  + *Renal pyramid*
  + Cortex
  + Medulla
  + *Minor calyx*
  + *Major calyx*
  + *Renal pelvis*
* *Renal artery*
* *Renal vein*
* *Ureter*
* *Urinary bladder*
  + Detrusor muscle
  + Internal urethral sphincter
* External urethral sphincter
* Urethra

\*\* Structures that are underlined in italics can also be seen on the cadaver or dissected sheep kidneys.

**Microscopic anatomy of the urinary system (nephron structure):**

Using Figure 27.4, as well as the kidney/nephron models, you should be able to identify:

* Glomerular capsule
* Glomerular capillaries
* Afferent arteriole
* Efferent arteriole
* Proximal convoluted tubule
* Loop of Henle (a.k.a., the nephron loop)
  + Ascending limb
  + Descending limb
* Distal convoluted tubule
* Collecting duct

Microscope slides:

* On slide #16 of the kidney, you should be able to identify the:
  + Cortex
  + Medulla
  + Pelvis
* On slide #18 of the bladder, you should be able to identify the:
  + Transitional epithelium
  + Smooth muscle layer (detrusor muscle)