**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)