**Urinary System Outline**

\*Know Functions and Organs

Kidneys

* Location
* Anatomy
  + Renal Hilum Renal Cortex
  + Fibrous Capsule Renal Medulla
  + Perirenal Fat Capsule Renal Pelvis
  + Renal Fascia Renal Calyces
  + Renal (Medullary) Pyramids Renal Columns
  + Ureter Renal Arteries and Veins
* Blood Flow (General idea)
* Physiology
  + Glomerulus and Renal Tubule
  + Nephrons (Cortical vs. Juxtamedullary)
    - Anatomy
      * Afferent and Efferent Arterioles
      * Glomerulus and Glomerular Capillaries
      * Glomerular Capsule (Bowman’s)
      * Proximal Convoluted Tubule
      * Loop of Henle
      * Distal Convoluted Tubule
      * Collecting Duct
      * Peritubular Capillaries
    - Physiology

Know what occurs at each step – what substances get reabsorbed, retained, and secreted

The pathway through the kidneys in which urine is excreted.

* + - * Glomerular Filtration
      * Tubular Reabsorption
      * Tubular Secretion
      * Maintaining Water Balance
        + ICF vs. ECF
        + Osmoreceptors
        + ADH
      * Regulating Electrolyte Balance
        + Aldosterone
        + Renin Angiotensin Mechanism
      * Regulating Blood pH
        + Bicarbonate Buffer System
        + Respiratory
        + Renal Mechanisms

Urinary Bladder, Ureters, Urethra

* Trigone
* Detrusor Muscles
* Transitional Epithelium
* Internal and External Sphincters
* Peristalsis
* Mictrurition