

UNIT 11 - URINARY SYSTEM

STANDARDS AND OBJECTIVES

STANDARD

11 Students will describe the structures and functions associated with the urinary system.

OBJECTIVES

- 11.01 Identify the general functions of the urinary system.
- 11.02 Identify the four major organs of the urinary system.
(kidneys, ureters, bladder, urethra)
- 11.03 Identify the gross anatomy of the kidney.
(renal cortex, renal medulla, renal pyramids, renal pelvis)
- 11.04 Identify the microscopic structures of the nephron:
(renal corpuscle, glomerulus, glomerular [Bowman's] capsule, afferent arteriole, efferent arteriole), renal tubule (proximal convoluted tubule, descending limb, nephron loop, ascending limb, distal convoluted tubule and collecting duct) and peritubular capillaries.
- 11.05 Describe the three basic physiological processes and the structures involved in urine formation. (filtration, reabsorption, secretion)
- 11.06 Identify abnormal constituents of urine.
(glucose, ketones, erythrocytes, leukocytes, bilirubin, microbes)
- 11.07 Describe the methods of fluid intake (oral [liquid and solid], intravenous, metabolic) and output (micturition, voiding, sweat, feces, exhaled vapor).
- 11.08 Identify the following diseases or disorders associated with the urinary system.
(cystitis, diabetes insipidus, glomerulonephritis, incontinence, kidney stones, renal failure, urinary tract infections)