A & P 2 – Unit 8 Learning Objectives & Review

Mary Stangler Center for Academic Success

This review is meant to highlight certain learning objectives from unit 8. It does not cover all concepts presented by your instructor. Refer back to your notes, unit objectives, labs, handouts, etc. to further prepare for your exam.

1. Identify the four major metabolic nitrogenous wastes, and explain the metabolic processes that produce them.

2. Describe the overall anatomy of the kidneys.

3. Describe the functions of the kidney, in addition to urine production.

4. Trace the flow of fluid through the nephrons and renal tubules.

5. Describe the processes of filtration, reabsorption, and secretion in the nephrons. Include the structures and products involved in each process, the direction of fluid movement, and the method of fluid movement.

6. Describe the function of each of the enzymes and hormones that help regulate urine volume and concentration, including renin, angiotensin, angiotensin I, angiotensin II, aldosterone, antidiuretic hormone, and atrial natriuretic peptide.

7. Explain the relationship between urine volume and concentration, blood volume and concentration, and blood pressure.

8. Identify and describe the anatomy of the scrotum and spermatic cord.

9. Identify and describe the anatomy of the testes, including the seminiferous tubules.

10. Identify and describe the function of the spermatic ducts.

11. Describe the composition of semen, and the function of each of its components.

12. Identify and describe the stages of mitosis and meiosis.

13. Describe the hormonal control of male puberty and sperm cell production.

14. Identify and describe the structures of the uterus and uterine walls.

15. Identify and describe the structures of the external female genitalia (vulva, pudendum).

16. Identify and describe the structures of the female breast.

17. Describe egg and follicle development including the events before birth as well as during puberty.

18. Identify and describe the phases of the ovarian cycle, and state what happens with egg and follicle development in each phase, including the action of hormones.

19. Identify and describe the phases of the menstrual cycle, and state what happens with the uterine lining in each phase, including the action of hormones.

20. Describe the function of the hormones of pregnancy.

21. Describe the function of the hormones of labor and childbirth (parturition).

22. Describe the processes of lactation and milk ejection, including the hormones involved.