Bio 101

Book: Human Biology: Concepts and Current Issues by Michael D. Johnson

Ch. 9 Immune System

General defense system: barriers, non specific defenses, specific defenses.

Lymph system, lymph nodes, spleen, Thymus gland, tonsils. Ways of impeding entry of pathogens. Function of Inflammation, mast cells, histamine, fever. Specific Defenses: antigen, antibody, b cells, t cells,. Clonal selection theory, memory cells, plasma cells. How vaccines work, allergies, HIV life cycle of the virus.

Ch. 10 Respiratory System

anatomy from images in chapter, gas exchange, structure of alveoli, bronchi, bronchioles, capillaries, diaphragm, effects of smoking on lungs, emphysema, pneumonia, TB , Carbon monoxide, surface area and diffusion, choking. Then take a look at the diversity of respiratory structures among other groups of animals in lecture.

Ch. 16 Reproductive systems

Female menstrual cycle: hormonal controls, role and/or origin of the following: estrogen, leutenizing hormone, graafian follicle, primary follicle, corpus luteum, progesterone, leuteal phase, follicular phase, where does fertilization usually occur? Where does implantation occur? Endometrium, progesterone receptors. Function of RU-486

Male function, glands that generate semen. Components of semen, origin of sperm, vas deferens, structure of interior of testes, what causes an erection (physically).

Birth control methods. Which help prevent transmission of STI’s? Which are most effective. What is difference between Pill and IUD?

**S\_T\_I\_’s\_:\_ \_**understand the causes, side effects, and treatments of the STI’s we talked about in class:

Bacterial and viral infections. These are also discussed in your text.

Describe the life cycle of the HIV virus. How do some of the drugs work to combat the virus? AZT? What is a retrovirus?