CHAPTER 28: Reproductive System
BI 236 – Study Questions

1) Trace the duct system that the sperm traverses from the site of its production to the exterior of the body.

2) Which accessory organs and glands contribute to the composition of semen? What are the functions of each?

3) What is the cremaster muscle? If a male did not have cremaster muscles, what would the ramifications be for his reproductive success?

4) Describe the steps involved in spermatogenesis. How many mature spermatozoa result from a single spermatogonia?

5) Describe the hormonal regulation of spermatogenesis… What two cells types are involved? What hormone targets each? What is produced by each?

6) Describe the major structural regions of a sperm and explain the function of each.

7) Oogenesis in the female results in one functional gamete – the ovum. What other cells are produced? Why do you think we see this “wasteful” type of gamete production in females instead of the more efficient type of production as seen in males (e.g. formation of four functional gametes from single stem cell…)?

8) List and summarize the important steps in the ovarian cycle.

9) What are the various regions of the Fallopian tube? What is the function of each?

10) What are the various regions of the uterus? What are the major functions of the uterus with respect to a developing fetus?

11) List and summarize the important steps in the uterine cycle.

12) Describe the hormonal regulation of the female ovarian cycle and uterine cycle… What hormones are produced? What is the function of each?

Applying Your Knowledge:

13) Women bodybuilders and women with eating disorders such as anorexia nervosa commonly experience amenorrhea (loss of menstruation). What does this fact suggest about the relation between body fat and menstruation? What might be the benefit of amenorrhea under such circumstances?