Study Guide # 1

Human Anatomy

Introduction to Human Anatomy and Cells

1. Describe the *levels of organization* of the human body and superficial body regions (Lab Unit 1)
2. Describe the anatomical position. Why is this concept useful and important? (Lab Unit 1)
3. What are the planes of the body? Describe the anatomical terms of position and direction. (Lab Unit 1)
4. Name and describe the various body cavities and identify the major organs in each. (Lab Unit 1)

**Epithelial and Connective Tissues; Membranes; Fasciae**

1. Briefly list the 3 *primary germ layers* and the tissues they generate. Describe the 4 *primary tissues*.
2. Discuss the typical *characteristics* of epithelial tissue and list the general *functions* of this tissue.
3. Describe cell attachments in epithelial tissue and how the apical end can be specialized.
4. Describe the method of classification of epithelial tissue and the location of these tissues in the body.
5. What is glandular epithelium? Define and compare an exocrine gland to an endocrine gland.
6. Describe Merocrine, Apocrine and Holocrine glands (giving specific examples of these glands).
7. Discuss the *characteristics* of connective tissues. List the general *functions* of connective tissue.
8. List the specific names for the different types of loose, dense and supporting connective tissue.
9. Describe how these connective tissues differ from each other, their function and location in body.
10. List the *characteristics* and *functions* of 3 types of epithelial membranes and their location in the body.
11. Describe the role and location of superficial fascia, deep fascia and subserous fascia.

**The Integumentary System: Skin, Hair, Nails and Glands**

1. Discuss the general arrangement of the integumentary system and all of its functions in the body.
2. Describe the layers (strata) of the epidermis of the skin, their arrangement, structure and function.
3. Name 4 different cell types in the epidermis, their locations, structure and functions.
4. Describe the 2 layers of the dermis and how they differ; describe the hypodermis.
5. List and describe the accessory structures of the integumentary system: Hair, Nails and Glands.
6. Describe 3 different types of glands in the dermis. What are their functions and specific locations?
7. What accounts for skin color, how can it change? What is hair? Discuss its color and texture.
8. Discuss common skin disorders and how they arise. What is a pimple? Acne? Dermatitis? Eczema?
9. Does the thickness of skin vary, why? What are calluses, corns and other skin conditions?
10. Describe how the blood supply in the epidermis, dermis and hypodermis differ from one another.
11. Label the structures on the integumentary diagram. Outline the fingernail and hair/follicle structures.
12. Which cells are responsible for sensation in skin? Discuss structures associated with hair.
13. Discuss the important role of the integumentary system in the thermoregulation of the body.
14. Comprehensively describe the effects of aging on the integumentary system as discussed in class.
15. Describe the differences between a first, second and third degree burn. Include tissue damage, the symptoms, the risks factors and the recovery periods for each type.