

IVY TECH COMMUNITY COLLEGE OF INDIANA
RICHMOND/CONNERSVILLE

ANP 102 FALL, 2005—ANATOMY AND PHYSIOLOGY II
INSTRUCTOR: BETTY KLEIN, MS, RN

CLASS SCHEDULE

Wednesday, August 24, 2005

Introductions

Explanation of Syllabus and Expectations

Digestive System and Nutrition

Reading:

pp. 644-691 and related lab exercises

Objectives:

1. Name and describe the locations of the organs of the digestive systems and their major parts.
2. Describe the general functions of each digestive organ and of the liver.
3. Describe the structure of the wall of the alimentary canal.
4. Explain how the contents of the alimentary canal are mixed and moved.
5. List the enzymes secreted by the various digestive organs and describe the function of each enzyme.
6. Describe how the digestive secretions are regulated.
7. Explain how the products of digestion are absorbed.
8. List the major sources of carbohydrates, lipids, and proteins.
9. Describe how carbohydrates, lipids, and proteins are used by cells.

Wednesday, August 31, 2005

QUIZ Chapter 17a

Complete Chapter 17 Lecture and Discussion

Wednesday, September 7, 2005

QUIZ Chapter 17b

Chapter 17 Written Labs Due

Endocrine System

Reading:

pp. 468-507 and related lab exercises

Objectives:

1. Distinguish between endocrine and exocrine glands.
2. Explain how steroid and nonsteroid hormones produce effects on target cells.
3. Discuss how hormonal secretions are regulated by negative feedback mechanisms.
4. Explain how hormonal secretions may be controlled by the nervous system.
5. Name and describe the location of the major endocrine glands and list the hormones they secrete.
6. Describe the general functions of the hormones secreted by endocrine glands.
7. Explain how the secretions of each hormone are regulated.

Wednesday, September 14, 2005

QUIZ Chapter 13a

Complete Chapter 13 Lecture and Discussion

Wednesday, September 21, 2005

QUIZ Chapter 13b

Chapter 13 Written Labs Due

Respiratory System

Reading:

pp. 732-769 and related lab exercises

Objectives:

1. List the general functions of the respiratory system.
2. Name and describe the locations of the organs of the respiratory system.
3. Describe the functions of each organ of the respiratory system.
4. Explain how inspiration and expiration are accomplished.
5. Name and define each of the respiratory air volumes.
6. Locate the respiratory center, and explain how it controls normal breathing.
7. Discuss how various factors affect the respiratory center.
8. Describe the structure and function of the respiratory membrane.
9. Explain how oxygen and carbon dioxide are transported in the blood.

Wednesday, September 28, 2005

QUIZ Chapter 19a

Continue Chapter 19 Lecture and Discussion

Wednesday, October 5, 2005

QUIZ Chapter 19b

Blood System

Reading:

pp. 510-540 and related lab exercises

Objectives:

1. Describe the general characteristics of the blood and discuss its major function.
2. Distinguish between the various types of cells found in blood.
3. Explain how red cell production is controlled.
4. Define hemostasis and explain the mechanisms that help to achieve it.
5. List the major components of blood plasma and describe the functions of each.
6. Review the major steps in blood coagulation.
7. Explain the basis for blood typing and how it is used to avoid adverse reactions following blood transfusions.
8. Describe how blood reactions may occur between fetal and maternal tissues.

Wednesday, October 12, 2005

No Quiz

Continue Chapter 14

Labs and Class Presentations on Blood Disorders

Midterm Exam (Covers all material covered from beginning of course) will be distributed at the end of class on 10/12. It is due completed 10/19/05.

Wednesday, October 19, 2005

Midterm Exam is due

Chapter 14 Written Labs are due

Cardiovascular System

Reading:

pp. 542-606 and related lab exercises

Objectives:

1. Name the organs of the cardiovascular system and discuss their functions.

2. Name and describe the locations of the major parts of the heart and discuss the function of each part.
3. Trace the pathway of the blood through the heart and vessels of the coronary circulation.
4. Discuss the cardiac cycle and explain how it is controlled.
5. Identify the parts of a normal ECG pattern and discuss the significance of this pattern.
6. Compare the structures and functions of the major types of blood vessels.
7. Describe the mechanism that aids in returning venous blood to the heart.
8. Explain how blood pressure is created and controlled.
9. Compare the pulmonary and systemic circuits of the cardiovascular system.
10. Identify and locate major arteries and veins of the pulmonary and systemic circuits
11. Describe life-span changes in the cardiovascular system.

Wednesday, October 26, 2005

QUIZ Chapter 15a

Continue Lecture and Discussion Chapter 15

Sheep Heart Dissection

Wednesday, November 2, 2005

QUIZ Chapter 15b

Wednesday, November 9, 2005

NO QUIZ THIS WEEK

Chapter 15 Written Labs Due

Lymphatic System

Reading:

pp. 649-685 and related lab exercises

Objectives:

1. Describe the general functions of the lymphatic system.
2. Identify the locations of the major lymphatic pathways.
3. Describe how tissue fluid and lymph form and explain the function of lymph.
4. Explain how lymphatic circulation is maintained and describe the consequence of lymphatic obstruction.
5. Describe a lymph node and its major functions.
6. Describe the location of the major chains of lymph nodes.
7. Discuss the functions of the thymus and spleen.
8. Distinguish between specific and nonspecific defenses and provide examples of each.
9. Explain how two major types of lymphocytes are formed, activated, and how they function in immune mechanisms.

Friday, November 11, 2005—Last day to withdraw from course without a grade

Wednesday, November 16, 2005

QUIZ Chapter 16

Urinary System

Sheep Kidney Dissection

Reading:

pp. 722-805 and related lab exercises

Objectives:

1. Name the organs of the urinary system and list their general functions.
2. Describe the locations of the kidneys and the structures of a kidney.
3. List the functions of the kidneys.
4. Trace the pathway of blood through the major vessels within a kidney.
5. Describe a nephron and explain the functions of its major parts.

6. Explain how glomerular filtrate is produced and describe its composition.
7. Explain how various factors affect the rate of glomerular filtration and how this rate is regulated.
8. Discuss the role of tubular reabsorption in urine formation.
9. Describe the structure of the ureters, urinary bladder, and urethra.
10. Discuss the process of micturition and explain how it is controlled.

Wednesday, November 23, 2005
No Class, have a safe week.

Wednesday, November 30, 2005
NO QUIZ THIS WEEK
Continue Chapter 20
Chapter 20 Written Labs are due

Wednesday, December 7, 2005
QUIZ Chapter 20
Chapter 20 Written Labs are due

Final Exam will be distributed at the end of class on 12/7. It will be due at 5:00 p.m. on 12/14.

Reproduction

Reading:

pp. 830-874 and related lab exercises

Objectives:

1. Name the parts of the male reproductive system and describe the general functions of each part.
2. Describe the structure of a testis and explain how sperm cells are formed.
3. Trace the path followed by sperm cells from the site of their formation to the outside.
4. Explain how hormones control the activities of the male reproductive organs.
5. Name the parts of the female reproductive system and describe the general functions of each part.
6. Describe the structure of an ovary and explain how egg cells and follicles are formed.
7. Trace the path followed by an egg cell after ovulation.
8. Describe how hormones control the activities of the female reproductive organs.
9. Describe the major events that occur during a menstrual cycle.
10. Review the structure of the mammary glands.
11. Describe the major events in the growth and development of the embryo and fetus.
12. Describe the events leading up to and including fertilization.
13. Define principle broad concepts of genetics and describe the more commonly occurring genetic disorders.

Wednesday, December 14, 2005
Chapter 22 Written Labs are due

Final Exam is due to at 5:00 p.m. on 12/14.

Lab make-up is available tonight if you missed one.

All quizzes, labs, etc. should be completed by tonight

