

BIOLOGY 122 COURSE OUTLINE

- I. EMBRYOLOGY/REPRODUCTIVE SYSTEMS
 1. Reproductive Systems – Gross Anatomy Review
 2. Gamete Formation and Fertilization
 3. Early Development
 4. Embryonic Development
 5. Fetal Development
 6. The Chorion and Placental Structures and Function
 7. Parturition – The Birthing Process
 8. Lactation and Milk Letdown
 9. Problems With Pregnancies

- II. URINARY SYSTEM
 1. Urinary system - Gross Anatomy
 2. Kidney - Internal Gross Anatomy
 3. Kidney - Microscopic Structure
 4. Urine Formation
 5. Regulation of Kidney Blood Supply
 6. Urine – Normal
 7. Urine – Abnormal
 8. Diuresis
 9. Ureters
 10. Urinary Bladder
 11. Micturition

- III. DIGESTIVE SYSTEM
 1. Introduction - Typical cross-section of GI Tract
 2. Buccal Cavity
 3. Pharynx
 4. Esophagus
 5. Stomach
 6. Small Intestine
 7. Large Intestine
 8. Hormonal Role of Digestive Secretions

- IV. CARDIOVASCULAR SYSTEM
 1. Introduction, General Anatomy and Overview
 2. Arteries
 3. Veins
 4. Capillaries
 5. Pulmonary Circulation
 6. Systemic Circulation
 7. Portal Systems
 8. Venous Flow
 9. Heart

V. BLOOD

1. Introduction
2. Blood Functions
3. Facts about Blood
4. Formed Elements
 - a. Erythrocytes
 - b. Leukocytes
 - c. Thrombocytes
5. Plasma
6. Inorganic Salts
7. Wastes
8. Nutrients
9. Gases
10. Blood Typing

VI. LYMPHATIC SYSTEM

1. Introduction
2. Lymph
3. Vessels
4. Lymphatic Tissue
5. Flow

VII. RESPIRATORY SYSTEM

1. Introduction
2. Organs of Respiratory System
3. Mechanics of Breathing
4. Control of Breathing
5. Pulmonary Definitions and Terms

VIII. ENDOCRINE SYSTEM

1. General Introduction
2. Method of Study
3. Pituitary (Hypophysis)
4. Adrenal Gland (Suprarenal)
5. Thyroid
6. Parathyroid
7. Pancreas
8. Thymus
9. Pineal
10. Testis - (See Reproductive System)
11. Ovaries - (See Reproductive System)