

HUMAN PHYSIOLOGY 3070

Spring 2012

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Textbook: Guyton; Human Physiology and Mechanisms of Disease, W.B. Saunders
or Sherwood: Human Physiology from Cells to Systems, Brooks and Cole

1/10 Introduction

1/12 Overview of Basic Cell Biology

1/17 **Circulation:** Heart, Anatomy and Excitation

1/19 Hemodynamics; Regulation of Arterial Pressure

1/24 Cardiac Output; Coronary Blood Flow

1/26 Capillary Exchange; Hemodynamics

1/31 Review of cardiovascular system

2/2 **Exam I** (100 pts.)

2/7 **Excretion and Gas Exchange:** Kidney, Anatomy and Function

2/9 Formation of Urine

2/14 Regulation of Fluids, pH

2/16 Lungs; Exchange of Respiratory Gases

2/21 Review of Renal and Respiratory Systems

2/23 **Exam II** (100 pts.)

2/28 Digestion and Metabolism: GI tract, Liver; Pancreas

3/1 Absorption and Storage Metabolism

3/6 No class (Spring Break)

3/8 No class (Spring Break)

3/13 Temperature Regulation

3/15 Muscle Contraction; Exercise

3/20 Review of digestion/temperature regulation

3/22 **Exam III** (100 pts.)

3/27 No class

3/29 **Nervous and Hormonal Control:** Basic Mechanisms; Pituitary

4/3 Regulation of Metabolism; Insulin/Glucagon

4/5 Adrenocortical Hormones; Calcium Homeostasis

4/10 Organization of the Nervous System; Synapses

4/12 Sensory Physiology Autonomic Nervous System; Pharmacology

4/17 **Exam IV** (100 pts.)

4/19 **Basic Defense Mechanisms:** Local Inflammatory Response

4/24 Humoral and Cell-Mediated Immunity

4/26 Allergy, Infection

Exam V, not cumulative (100 pts.) Final Exam Period