UNIVERSITY OF GUELPH
DEPARTMENT OF BIOMEDICAL SCIENCES
BIOM3200 WINTER 2018

Time: Jan. 9 to April 5, Tuesdays and Thursdays, 10:00-11:30 a.m.
Location: ROZ 101
Text: Fox’s Human Physiology, ISBN: 0077836375
Coordinator, Lecturer: Dr. Tami Martino, tmartino@uoguelph.ca

TA: Danyelle Liddle: dliddle@uoguelph.ca
TA: Priya Mistry: pmistry@uoguelph.ca
TA: Lisa Reynen, lreynen@uoguelph.ca
TA: Cristine Reitz, creitz@uoguelph.ca

Lecture Schedule:

**ENDOCRINE SYSTEM**

Jan. 9  Endocrine Principles
       Hormones and Receptors
       Pituitary Gland

       11  Hypothalamic control
            Adrenal axis
            Thyroid

       16  Calcium balance
            Growth Control

       18  Male Endocrine System
            Female Endocrine System

**RENAL SYSTEM**

23  Electrolyte and water balance
    Anatomy of the kidney
    Microanatomy of the kidney, filtration

25  Renal regulation: the nephron, glomerular filtration
    Tubular reabsorption, secretion
    Regulation of acid-base balance

30  REVIEW CLASS FOR TERM TEST #1

Feb. 01  Term test #1 (1 hour, covers lectures Jan 9 – Jan 25, inclusive)
CARDIOVASCULAR SYSTEM

Feb. 06  Cardio-vascular system
         Blood vessels: structure, hemodynamics
         Blood Flow
         Regulation of peripheral resistance

08  Cardio-respiratory system
     Cardiac Anatomy
     Cardiac contraction (cellular)
     Heart Disease

REPRODUCTIVE SYSTEM

Feb. 13  Gametogenesis
         Pregnancy, Early embryo development

15  Female/Male Reproductive systems
     Sex determination and differentiation

Mon. Feb 19 – Friday Feb 23: WINTER BREAK NO CLASSES

27  Partuition, postpartum, lactation

Mar. 01  REVIEW CLASS FOR TERM TEST #2

Mar. 06  Term test #2 (1 hour, covers lectures February 06 – 27, inclusive,
         Reproductive and Cardiovascular Systems

BLOOD & IMMUNE SYSTEM

Mar.  8  Blood: constituents and functions of plasma

       13  Erythrocytes, Leukocytes

       15  Platelets and blood coagulation
NERVOUS SYSTEM

Mar. 20  Introduction to neurophysiology
        Cellular Physiology
        Autonomic Nervous system

22  Cell membrane and transport
    Membrane resting and action potentials
    Action potential conduction

27  Central Nervous system

DIGESTIVE SYSTEM

29  Structure and Function

Apr. 03  Digestion and Absorption
        Role of accessory organs

05  REVIEW CLASS FOR FINAL EXAM

All sections are on the FINAL EXAM (2 HOURS), which covers all material on the Endocrine, Renal, Reproductive, Cardiovascular, Immune, Cardiovascular, Nervous, and Digestive Systems. However greater emphasis will be on the sections that have not yet been tested – Immune System, Neurophysiology, and digestion. Details will be provided in class.

FINAL EXAM

TUESDAY April 17, 2017 11:30 – 1:30