

**CAMB 532
HUMAN PHYSIOLOGY**

**Fall 2021 Mon, Weds, Fri, 8:30-10:00am
BRB 253**

Directors: Dr's Tejvir S. Khurana, Benjamin L. Prosser, Paul M. Titchenell

Membrane Physiology

Sep. 1 Dr. Hoshi Action Potentials/Voltage-gates Ion Channels
Sep. 3 Dr. Hoshi Synaptic Transmission and Ligand-gated Ion Channels

Sept. 6 *No class (Labor Day)*

Nervous System

Sep. 8 Dr. Thomas Nervous System
Sep. 10 Dr. Thomas Central Nervous System
Sep. 13 Dr. Thomas Peripheral Nervous System

Muscle Physiology

Sep. 15 Dr. Ostap Contractile Proteins and Striated Muscle-1
Sep. 17 Dr. Ostap Striated Muscle-2
Sep. 20 Dr. Ostap Smooth Muscle

Cardiovascular System

Sept. 22 Dr. Prosser Cardiac and Skeletal Muscle Signaling
Sept. 24 Dr. Margulies Myocardial Physiology and Cardiac Pump Function
Sept. 27 Dr. Margulies Vascular Physiology

Sept. 29 ***Self Study***

Oct. 1 Dr. Margulies Cardiovascular Integration

Oct. 4 *Exam 1 (Membranes, Neuro, Muscle, Cardiovascular)*

Renal System

Oct. 6 Dr. Hillburg Organization of the Kidney and Glomerular Filtration
Oct. 8 Dr. Hillburg Regulation of Sodium Balance
Oct. 11 Dr. Bahrainwala Renal Regulation of Potassium and Acid Balance
Oct. 13 Dr. Bahrainwala Renal Regulation of Water Balance

Oct. 14-17 *No class (Fall Break)*

Endocrine Physiology

Oct. 18 Dr. Titchenell Neuroendocrinology
Oct. 20 Dr. Titchenell Thyroid; Adrenal
Oct. 22 Dr. Titchenell Glucose Homeostasis; Insulin Signaling

Reproductive Physiology

Oct. 25 Dr. Mainigi Female Reproductive Physiology
Oct. 27 Dr. Dokras Fertilization

Oct. 29 ***Self Study***

Nov. 1 Dr. Masson Male Reproductive Physiology

Nov. 3 **Exam 2 (Renal, Endo, Reproductive)**

Nov. 5 **No class**

Integration

Nov. 8 Dr. Khurana Integrative Responses to Exercise
Nov. 10 Dr. Khurana Integrative Responses to the Environment

Digestive System

Nov. 12 Dr. Hamilton GI Tract Structure and Motility/Absorption
Nov. 15 Dr. Hamilton The Integrated Response to a Meal
Nov. 17 Dr. Hayes Neuro-endocrine control of food intake
Nov. 19 Dr. Thaiss Gut microbiome

Sensory System

Nov. 22 Dr. Genovese Sensory Physiology

Nov. 24 **Self Study**

Nov. 25-28 **No Classes (Thanksgiving Break)**

Respiratory System

Dec. 1 Dr. Frank Ventilation/Perfusion & Gas Exchange and Transport
Dec. 3 Dr. Frank Gas Exchange and Transport

Dec. 6 **Self Study**

Dec. 8 **Exam 3 (Digestive, Respiratory, Sensory, Integration)**