

## Spring 2012: BME/PSIO 511

M/W/F                      1 hr lectures                      9:00 – 9:50 AM                      COM Rm. 8403

### Section 1                      Cardiovascular Physiology

<b>Date</b>	<b>Instructor</b>	<b>Lecture Topic</b>
Jan 11 (W)	Burt	The Cardiovascular System <b>Note: Organizational Meeting after lecture (~10-11 am)</b>
Jan 13 (F)	Burt	Cardiac Cycle
Jan 18 (W)	Burt	Cardiac Electrophysiology - ECG
Jan 20 (F)	Burt	Contractile Function <b>Note Location Change Kiewit Auditorium, Arizona Cancer Center</b>
Jan 23 (M)	Burt	Intrinsic regulation of cardiac function
Jan 25 (W)	McDonagh	The Peripheral Circulation and Regulation of Blood Pressure
Jan 27 (F)	McDonagh	Regulation of Organ Blood Flow
Jan 30 (M)	McDonagh	Microcirculation
<u>Feb 1 (W)</u>	EXAM #1	CARDIOVASCULAR EXAM

### Section 2                      Renal Physiology

<b>Date</b>	<b>Instructor</b>	<b>Lecture Topic</b>
Feb 3 (F)	Brooks	Introduction to the Renal System
Feb 6 (M)	Brooks	Tubular Transport
Feb 8 (W)	Brooks	Osmoregulation and Vasopressin
Feb 10 (F)	Lynch	pH and Acid Base Regulation I
Feb 13 (M)	Brooks	Renin-Angiotensin-Aldosterone System
Feb 15 (W)	EXAM #2	RENAL EXAM

**Section 3****Endo-Repro**

<b>Date</b>	<b>Instructor</b>	<b>Lecture Topic</b>
Feb 17 (F)	Limesand	Basic Concepts in Endocrinology
Feb 20 (M)	Limesand	Calcium Homeostasis
Feb 22 (W)	Limesand	Glucose homeostasis
Feb 24 (F)	Hoyer	Neuroendocrine
Feb 27 (M)	Limesand	Thyroid Physiology
Feb 29 (W)	Hoyer	Adrenal Cortex
March 2 (F)	Hoyer	Adrenal Medulla
March 5 (M)	Hoyer	Female Reproduction <b>Note: Specific Aims and References due to D2L by 11: 59 pm</b>
March 7 (W)	Hoyer	Male Reproduction
March 9 (F)	EXAM #3	ENDO-REPRO EXAM

**March 12-16****Spring Break- no classes****Section 4****Respiratory Physiology**

<b>Date</b>	<b>Instructor</b>	<b>Lecture Topic</b>
March 19 (M)	Fregosi	Pulmonary: basic physical principles & anatomy; lung microstructure.
March 21 (W)	Fregosi	Mechanics of the lung and chest wall
March 23 (F)	Fregosi	Gas diffusion from lung to blood
March 26 (M)	Fregosi	O <sub>2</sub> and CO <sub>2</sub> transport
March 28 (W)	Fregosi	Pulmonary blood flow
March 30 (F)	Fregosi	Pulmonary regulation of acid-base balance <b>Note: Location change Drachman Auditorium</b>
<u>April 2 (M)</u>	EXAM #4	RESPIRATORY EXAM

**Section 5****Gastrointestinal Physiology**

<b>Date</b>	<b>Instructor</b>	<b>Lecture Topic</b>
April 4 (W)	Lynch	Introduction to GI Physiology
April 6 (F)	Lynch	GI Smooth Muscle Motility
April 9 (M)	Lynch	Secretion: Salivary and Stomach
April 11 (W)	Lynch	Secretion: Pancreatic and Biliary
April 13 (F)	Lynch	Digestion and Absorption
April 16 (M)	EXAM #5	GASTROINTESTINAL EXAM

**Section 6****Neurophysiology**

<b>Date</b>	<b>Instructor</b>	<b>Lecture Topic</b>
April 18 (W)	Gothard	Principles NS organization
April 20 (F)	Gothard	Somatosensory system
April 23 (M)	Gothard	Motor systems
April 25 (W)	Gothard	Autonomic Nervous System
April 27 (F)	Gothard	Neurotransmitters and neuromodulators
April 30 (M)	Gothard	Learning and memory <b>Note: Research Proposal due to D2L by 11:59 pm</b>
May 2 (W)	Gothard	Executive function and the frontal lobes
May 7 (M)	EXAM #6	NEURO EXAM <b>Note Time change: 10:30 am – 11:30 am</b>