

BIOC33 and BIOC34 (Human Physiology) 2015 Lecture Schedule

Week	Lec.#	Lecture Topic
1	1	(CV) Electrical Activity of the Heart
	2	(CV) Electrocardiogram (ECG)
2	3	(CV) ECG; The Electrical Axis of the Heart; The Cardiac Cycle
	4	(CV) The Cardiac Cycle; Regulation of Cardiac Output (heart rate)
3	5	(CV) Regulation of Cardiac Output (stroke volume)
	6	(CV) CV) Regulation of CO; Heart Failure; Blood Flow Regulation
4	7	(CV) Blood Flow Regulation
	8	(CV) Blood Pressure Regulation; (Resp) Intro to Respiratory Physiology
5	9	(Resp) Pulmonary Mechanics
	10	(Resp) Pulmonary Mechanics; Spirometry; Lung Volumes and Capacities
6	11	(Resp) Spirometry; Alveolar Ventilation; Blood Gas (O ₂ and CO ₂) Transport
	12	(Resp) Blood Gas (O ₂ and CO ₂) Transport; Ventilation-Perfusion Ratios
7	13	(Resp) Blood Gas Transport; Ventilation-Perfusion Ratios
	14	(Resp) Control of Breathing
8	15	(Resp) Sleep and Sleep-Related Breathing Disorders
	16	(Renal) Kidney Function: Glomerular Filtration
9	17	(Renal) Reabsorption, Secretion and Excretion; Na ⁺ and K ⁺ Regulation
	18	(Renal) Calcium and Glucose Regulation; Clearance
10	19	(Renal) Medullary Osmotic Gradient; Urine Production; Acid-base Balance
	20	(Renal and respiratory) Acid-base Balance
11	21	(GI) Salivary Glands; The Esophagus; Stomach Function
	22	(GI) The Intestine; The Pancreas; Diabetes; The Liver
12	23	(GI) Liver Function; Biliary System; Nutrient Digestion
	24	(GI) Neural and Hormonal Regulation of Digestion; Review

Note: Some topics may carry over from one lecture to the next.

CV, Cardiovascular Physiology; Resp, Respiratory Physiology; Renal, Renal Physiology; GI, Gastrointestinal (Digestive) Physiology