

Day	Date	Time	Instructor	Activity	Topic	Reading	Key Concepts	
M	4-Jan	2:00-3:30	Overton	Lecture	ANS	45-64	Review of Functional anatomy and neurotransmitters; physiological actions of SNS and PNS, ANS Drugs	
T	5-Jan	3:00-4:30	Overton	Lecture	ANS/Hemodynamics 1	45-64	Cardiac output, Resistance to Blood flow; Blood pressure;	
W	6-Jan	2:00-3:30	Overton	Lecture	Hemodynamics 2	111-125	Peripheral artery disease, Vascular compliance; Hemodynamic calculations	
R	7-Jan	2:00-3:00	Overton	Optional Q&A				
F	8-Jan	1:00 - 1:20		Quiz 1	All Quizzes are at 1:00 on Fridays (except 3/5)			
F	8-Jan	2:30-4:00	Overton	Quiz 1/Lecture	Cardiac Electrophysiology	125-136	Nodal and myocyte action potentials; Action potential conduction; Autonomic control of heart rate,	
M	11-Jan	2:00-3:30	Overton	Lecture	Cardiac Cycle	148-151	Phases of cardiac cycle; Heart sounds; Murmurs, Stroke volume and cardiac output; Fick principle	
T	12-Jan	3:00-4:30	Facilitators	Small Groups	ANS; Hemodynamics			
W	13-Jan	2:00-3:30	Overton	Lecture	ECG	136-137	Components of standard ECG; ECG lead configurations; Introduction to Arrhythmias	
R	14-Jan	2:00-3:00	Overton	Optional Q&A				
F	15-Jan	2:30-4:00	Overton	Quiz 2/Lecture	Cardiac Function	137-147	Cardiac EC coupling; Determinants of SV (Preload, Afterload, Contractility); Frank-Starling relationship; Pressure-Volume loops; Cardiac work and hypertrophy	
M	18-Jan		MARTIN LUTHER KING HOLIDAY					
T	19-Jan	3:00-4:30	Overton	Small Groups	ECG Cases			
WR	20-21st	MORNING	Overton	Harvey	Simulation Lab - Valve Disorders			
W	20-Jan	2:00-3:30	Overton	Lecture	Regulation of Blood Pressure - 1	156-59; 161-63	Autonomic tone; High Pressure Baroreflex; Low pressure baroreflex; Chemoreflexes	
R	21-Jan	2:00-3:00	Overton	Optional Q&A				
F	22-Jan	2:30-4:00	Overton	Quiz 3/Lecture	Regulation of Blood Pressure - 2	150-56; 159-61	Cardiac and vascular function curves; Renin-Angiotensin-Aldosterone system; Vasopressin; Endothelin	
M	25-Jan	2:00-3:30	Overton	Lecture	Microcirculation	163-66	Capillary structure and function; hydrostatic and oncotic pressure; edema and lymphatics; endothelial function	
T	26-Jan	3:00-4:30	Facilitators	Small Groups	Valve Disorders, Hypertension Cases			
W	27-Jan	2:00-3:30	Overton	Review - Exam I	Structured review for Exam 1			
R	28-Jan	2:00-3:00	Overton	Optional Q&A				
F	29-Jan		BLOCK EXAMINATION #1 8:00 AM -Covers material through Jan 26					
M	1-Feb	2:00-3:30	Overton	Lecture	Special circulations	166-169	Autoregulation; active and reactive hyperemia; neural and hormonal control of blood flow; regional circulations	
T	2-Feb	3:00-4:30	Overton	Lecture	Cardiovascular Integration - Hypertension			
W	3-Feb	2:00-3:30	Overton	Lecture	Integration: Orthostasis, Hemorrhage and Shock	173-78	Orthostasis; orthostatic intolerance; vasovagal syncope; hemorrhage and shock	

R	4-Feb	2:00-3:00	Overton	Optional Q&A				
F	5-Feb	2:30-4:00	Olcese	Quiz 4/Lecture	Endocrine Introduction	377-400	Hypothalamic - Pituitary - target gland concepts, hormone transport and release, receptors, binding, transduction, physiological effects	
M	8-Feb	2:00-3:30	Shephard	Lecture	Female Development and Reproduction	450-456	Functional anatomy, hormones, receptors, signal transduction, physiological effects: HPA axis Hormones, testes, ovarian cycle, puberty, fertilization, pregnancy, menopause	
T	9-Feb	3:00-4:30	Facilitators	Small Groups	CV Integrative Cases			
W	10-Feb	2:00-3:30	Shephard	Lecture	Pregnancy and Lactation	456-461	Placental physiology and pathophysiology, HCG testing, steroid hormones, common obstetric emergencies, stages of labor	
R	11-Feb	2:00-3:00	Shephard	Optional Q&A				
F	12-Feb	1:30-2:50 ***	Shephard	Quiz 5/Lecture (2:3	Puberty, Menopause	TBD	Adrenarache, menarache, clinical issues in puberty, physiologic basis of climacteric	
M	15-Feb	2:00-3:30	Olcese	Lecture	Male Development and Reproduction	441-450	Functional anatomy, hormones, receptors, signal transduction, physiological effects: HPA axis hormones, testes, sperm, puberty, fertilization	
T	16-Feb	3:00-4:30	Faciliators	Small Groups	Reproduction Cases			
W	17-Feb	2:00-3:30	Olcese	Lecture	Thyroid	400-408	TSH, triiodothyronine, thyroxine, hyperthyroidism, hyperthyroidism	
R	18-Feb	2:00-3:00	Olcese	Tutorial				
F	19-Feb	2:30-4:00	Olcese	Quiz 6/Lecture	Adrenals	408-420	ACTH, Cortisol(glucocorticoids),Aldosterone (mineralocorticoids), Cushing's, Addison's, Adrenal medulla (catecholamines), Pheochromocytoma	
M	22-Feb	2:00-3:30	Olcese	Lecture	Parathyroid - Calcium Homeostasis	428-437	PTH, calcitonin, calcium, phosphate homeostasis, vitamin D3, GI and renal function, Skin, feedback loops	
T	23-Feb	3:00-4:30	Faciliators	Small groups	Endocrine Cases			
W	24-Feb	2:00-3:30	Overton/Olcese	Review	Structured review for Exam 2			
R	25-Feb	2:00-3:00	Overton/Olcese	Optional Q&A				
F	26-Feb		BLOCK EXAMINATION #2 8:00 AM Covers material Feb 1 - Feb 23					
M	1-Mar	2:00-3:30	Overton	Lecture	Pulmonary System- Struction and Function	183-91	Lung volumes and capacities, anatomic and physiologic dead space, aveolar ventilation	
T	2-Mar	3:00-4:30	Overton	Lecture	Pulmonary Function Testing	TBD	Spirometry; Flow-volume loops, diffusion capacity	
W	3-Mar	2:00-3:30	Overton	Lecture	Lung Mechanics	191-202	Pulmonary pressures, compliance, obstructive and restrictive disease	
R	4-Mar	2:00-3:00	Overton	Review				
F	5-Mar	9:30-11:00	Overton	Quiz 7/Lecture	Gas Exchange -Quiz at 8:00 AM	202-17; 231	Blood gases, oxygen transport, carbon dioxide transport	

M	8-Mar							
T	9-Mar							
W	10-Mar							
R	11-Mar							
F	12-Mar							
<h1>Spring Break</h1>								
M	15-Mar	2:00-3:30	Overton	Lecture	Control and Integration	223-231	Peripheral chemoreflex, central chemoreflexes, altitude and exercise responses, sleep apnea	
T	16-Mar	3:00-4:30	Facilitators	Small Groups	Pulmonary Cases			
WR	17-18th	MORNING	Overton	Harvey	Cardiopulmonary conditions			
W	17-Mar	2:00-3:30	Yu	Lecture	Intro; Glomerular Filtration Rate and Renal BF	235-251	Filtration; reabsorption; secretion; GFR; renal blood flow	
R	18-Mar	2:00-3:00	Overton/Yu	Optional Q&A				
F	19-Mar	2:30-4:00	Yu	Quiz 8/Lecture	Tubular Function	263-285	transport, active, passive, cotransport, counter transport, T <sub>m</sub> , reabsorption: glucose, Na, K, Cl, Ca, H, absorption, secretion, loop of Henle	
M	22-Mar	2:00-3:30	Yu	Lecture	ECF Reg and Fluid Volume	285-295	ADH, Renin, Angiotensin, Aldosterone, Loop of Henle (ascending limb), distal tubule, collecting duct, counter current multiplier system (osmolarity) for Na and NH <sub>3</sub> .	
T	23-Mar	3:00-4:30	Facilitators	Small Groups	Renal Cases			
W	24-Mar	2:00-3:30	Yu	Lecture	Renal Acid-Base Balance	299-312	Renal and respiratory buffers and acid-base balance and imbalance, Henderson-Hasselbalch	
R	25-Mar	2:00-3:00	Yu	Optional Q&A				
F	26-Mar	2:30-4:00	Overton	Quiz 9/Lecture	Clinical Acid-Base balance	312-324	Basic disorders, Causes of acidosis and alkalosis, compensatory mechanisms	
M	29-Mar	2:00-3:30	Yu	Lecture	Tubular Dysfunction, Micturition and Wrap-up	None	Glomerular dysfunction, pre-renal, renal, post-renal, micturition	
T	30-Mar	3:00-4:30	Facilitators	Small Groups	Acid - Base Cases			
W	31-Mar	2:00-3:30	Overton/Yu	Review	Structured review for Exam 3			
R	1-Apr	2:00-3:00	Overton/Yu	Optional Q&A				
F	2-Apr		BLOCK EXAMINATION #3 8:00 AM Covers material Mar 1 - Mar 30					
M	5-Apr	2:00-3:30	Olcese	Lecture	Pancreas/Diabetes Mellitus	420-428	Insulin/Glucagon, release, feedback, alpha cells, beta cells, pancreas, isles of Langerhans, physiological function and dysfunction, Type 1 and Type 2, insulin dependent and insulin independent, receptors, transduction	
T	6-Apr	3:00-4:30	Facilitators	Small Groups	Diabetes Cases			

W	7-Apr	2:00-3:30	Appelbaum	Lecture	GI Intro: Regulatory substances in GI tract	327-335	Functional anatomy & innervation GI hormones (gastrin, CCK, secretin, GIP) Paracrines & Neurocrines, Peptic Ulcer Disease, Zollinger Ellison Syndrome)	
R	8-Apr	2:00-3:00	Olcese/TBA	Optional Q&A				
F	9-Apr	2:30-4:00	Appelbaum	Quiz 10/Lecture	GI - Motility	343-353	Slow waves, receptive relaxation, gastric emptying, GERD, achalasia, segmentation, peristalsis, mass movements, gastrocolic reflex. constipation, diarrhea, irritable bowel syndrome, Hirschsprung's disease	
M	12-Apr	2:00-3:30	Dangiolo	Lecture	GI - Secretions	353-359	Salivary, Gastric, Pancreatic, Biliary (enterohepatic circulation of bile salts)	
T	13-Apr	3:00-4:30	Facilitators	Small Groups	GI Cases			
W	14-Apr	2:00-3:30	Dangiolo	Lecture	GI - Digestion and Absorption	359-375	Lactose Intolerance, Malabsorption, Cystic Fibrosis, Deficiency of Bile Salts, Intestinal Absorption & Secretion, Diarrhea (osmotic, secretory), Decreased Surface Area for Absorption	
R	15-Apr	2:00-3:00	TBA					
F	16-Apr	2:30-4:00	Overton	Quiz 11/Lecture	Obesity	TBD	Leptin. ghrelin, response to overfeeding, response to starvation and weight-loss, gastric-by pass	
M	19-Apr	2:00-3:30	Overton	Lecture	Integration: Temperature regulation and exercise	169-75	Response to dynamic and resistance exercise; Valsalva, Response to heat and cold; Fever; Heat shock and heat stroke	
T	20-Apr	3:00-4:30	Facilitators	Small Groups	Mult-system Cases			
W	21-Apr	2:00-3:30	Overton/TBA	Review	Structured review for Exam 4			
R	22-Apr	2:00-3:00	Overton/TBA	Optional Q &A				
F	23-Apr		BLOCK EXAM #4 8:00 AM Covers April 5 - April 20 plus designated cumulative objectives					
M	26-Apr							
T	27-Apr							
W	28-Apr							
R	29-Apr	8:00	Biochemistry Shelf Exam					
F	30-Apr	8:00	Physiology Shelf Exam					