

Date	Day	Time	Topic	Lecturer
August 2019				
8/12	M	8:00	Introduction to Human Function	Shiemke
-	-	9:00	Water, buffers and Physiological pH	Gunther
-	-	10:00	Amino acids and the peptide bond	Shiemke
8/13	T	8:00	Levels of protein structure I	Shiemke
-	-	9:00	Levels of protein structure II	Shiemke
-	-	10:00	Fibrous proteins collagen and elastin	Shiemke
8/14	W	8:00	Glycoproteins, proteoglycans and extracellular matrix	Shiemke
-	-	9:00	Myoglobin, hemoglobin, O ₂ Transport & blood buffering	Shiemke
-	-	10:00	Marfan Syndrome (CC: Clinical Correlation)	Hummel
-	-	11:00	Problem Based Learning (PBL)	-
8/15	Th	8:00	Diffusion and osmosis	Yu
-	-	9:00	Biological membrane structure	Shiemke
-	-	10:00	Introduction to membrane transport	Shiemke
-	-	11:00	Active Learning & Integration	Shiemke
8/16	F	8:00	Applications of Membrane Transport	Shiemke
-	-	9:00	Ionic current & fluxes	Yu
-	-	10:00	Membrane potential and Action Potentials	Yu
-	-	11:00	Active Learning & Integration	Yu/Shiemke
8/19	M	8:00	Enzyme catalysis, kinetics, and mechanisms	Shiemke
-	-	9:00	Cardiac Action Potential and Ion Channels (I)	Yu
-	-	10:00	Cardiac Action Potential and Ion Channels (II)	Yu
8/20	T	8:00	Regulating Enzyme Activity	Shiemke
-	-	9:00	Enzyme inhibition	Gunther
-	-	10:00	Normal ECG	Yu
8/21	W	8:00	Therapeutic enzyme inhibitors I	Gunther
-	-	9:00	Therapeutic enzyme inhibitors II	Gunther
-	-	10:00	AIDS (CC)	Labus
-	-	11:00	PBL	-
8/22	Th	8:00	Blood clotting I	Gunther
-	-	9:00	Blood clotting II	Gunther
-	-	10:00	Blood clotting disorders (CC)	STAFF
-	-	11:00	Active Learning & Integration	Gunther/Yu
8/23	F	8:00	Introduction to nervous system	Goodman
-	-	9:00	Neuromuscular junction I	Stauber
-	-	10:00	Neuromuscular junction II	Stauber
-	-	11:00	Active Learning & Integration	Gunther
8/26	M	8:00	Skeletal Muscle I	Stauber
-	-	9:00	Skeletal Muscle II	Stauber
-	-	10:00	Introduction to signal transduction	Goodman
8/27	T	8:00	Cardiac Muscle I	Stauber
-	-	9:00	Cardiac Muscle II/Smooth muscle	Stauber
-	-	10:00	Introduction to the endocrine system	Goodman

8/28	W	8:00	Hypothalamus- pituitary	Goodman
-	-	9:00	Mitosis, meiosis, cell cycle	Sasi
-	-	10:00	Chromosome structure I	Sasi
-	-	11:00	PBL	-
8/29	Th	-	STUDY DAY FOR EXAM 1 - NO CLASS	-
8/30	F	8:30	EXAMINATION 1	-
September 2019				
9/02	M	-	Labor Day Recess (No Class)	-
9/03	T	8:00	DNA replication I	Pugacheva
-	-	9:00	Intro to Cardiovascular Physiology	Paternostro
-	-	10:00	Cardiac Cycle I	Paternostro
9/04	W	8:00	DNA replication II	Pugacheva
-	-	9:00	Cardiac Cycle II	Paternostro
-	-	10:00	Myocardial Mechanics	Paternostro
-	-	11:00	PBL	-
9/05	Th	8:00	Mutation and DNA repair	Pugacheva
-	-	9:00	Pressure-Volume Relationships	Paternostro
-	-	10:00	Cardiac Work & Metabolism	Paternostro
-	-	11:00	Active Learning & Integration	Pugacheva
9/06	F	8:00	Xeroderma pigmentosum; repair defects (CC)	Hummel
-	-	9:00	Chromosome structure II	Sasi
-	-	10:00	Heart Failure	Paternostro
-	-	11:00	Active Learning & Integration	Paternostro/Sasi
9/09	M	8:00	Modes of Inheritance I	Hummel
-	-	9:00	Modes of Inheritance II	Hummel
-	-	10:00	Hemodynamics	Paternostro
9/10	T	8:00	ECG I	Rhodes
-	-	9:00	ECG II	Rhodes
-	-	10:00	Transcription	Mathers
-	-	11:00	Biochemistry review session	Shiemke
9/11	W	8:00	Population genetics	Hummel
-	-	9:00	mRNA synthesis and processing	Mathers
-	-	10:00	RNA processing: tRNA and rRNA	Pugacheva
-	-	11:00	PBL	-
9/12	Th	8:00	Vascular mechanics I	Paternostro
-	-	9:00	Vascular mechanics II	Paternostro
-	-	10:00	Genetic code and translation	Pugacheva
-	-	11:00	Active Learning & Integration	Paternostro
9/13	F	8:00	Vascular Function Curves	Paternostro
-	-	9:00	Extrinsic Control of Circulation	Paternostro
-	-	10:00	Regulation of gene expression in prokaryotes	Mathers
-	-	11:00	Active Learning & Integration	Mathers/Hummel
-	-	PM	Cardiovascular simulation lab	-
9/16	M	8:00	Regulation of gene expression in eukaryotes	Mathers

-	-	9:00	Baroreceptor Reflex	Paternostro
-	-	10:00	Intrinsic Control of Blood Flow	Paternostro
-	-	11:00	Physiology review session	Paternostro
-	-	PM	Cardiovascular simulation lab	-
9/17	T	8:00	Capillary exchange	Paternostro
-	-	9:00	Special Circulations	Paternostro
-	-	10:00	Ultrasound Evaluation of Cardiovascular Physiology in the Clinical Setting	Minardi
-	-	11:00	Biochemistry review session	Shiemke
9/18	W	8:00	Integrated Cardiovascular Response I	Paternostro
-	-	9:00	Integrated Cardiovascular Response II	Paternostro
-	-	10:00	Genetic screening	Hummel
-	-	11:00	PBL	-
9/19	Th	-	STUDY DAY FOR EXAM 2 - NO CLASS	-
9/20	F	8:30	EXAMINATION 2	-
9/23	M	8:00	Mechanism of protein biosynthesis	Pugacheva
-	-	9:00	Protein synthesis; Protein degradation	Pugacheva
-	-	10:00	Fluid Balance	Paternostro
9/24	T	8:00	Molecular genetics I	Mathers
-	-	9:00	Molecular genetics II	Mathers
-	-	10:00	Volume and Osmotic Challenges	Paternostro
9/25	W	8:00	Molecular trafficking and sorting	Pugacheva
-	-	9:00	Cell Volume Challenges and Regulation 1	Paternostro
-	-	10:00	Cell Volume Challenges and Regulation 2	Paternostro
-	-	11:00	PBL	-
9/26	Th	8:00	Cell Cycle Control	Pugacheva
-	-	9:00	Renal Structure	Paternostro
-	-	10:00	Regulation of Renal Blood Flow	Paternostro
-	-	11:00	Active Learning & Integration	Pugacheva/Mathers
9/27	F	8:00	Cancer	Pugacheva
-	-	9:00	Glomerular filtration	Paternostro
-	-	10:00	Renal Clearance 1	Paternostro
-	-	11:00	Active Learning & Integration	Paternostro
9/30	M	8:00	Colon cancer (CC)	Hummel
-	-	9:00	Human Genomics: Applications to Medicine (CC)	Hummel
-	-	10:00	Renal Clearance 2	Paternostro
-	-	11:00	Physiology review session	Paternostro
October 2019				
10/01	T	8:00	Tubular Sodium Transport	Paternostro
-	-	9:00	Regulation of Sodium Excretion	Paternostro
-	-	10:00	Introduction to Metabolism; Bioenergetics	Shiemke
-	-	11:00	Biochemistry review session	Shiemke
10/02	W	8:00	Treatment of Genetic Disease I	Narumanchi
-	-	9:00	Treatment of Genetic Disease II	Narumanchi
-	-	10:00	Tubular Potassium Transport	Paternostro

-	-	11:00	PBL	-
10/03	Th	8:00	Signal Transduction in Metabolism	Shiemke
-	-	9:00	Glucose uptake and glycolysis	Shiemke
-	-	10:00	Urea and Concentrating Mechanism 1	Paternostro
-	-	11:00	Active Learning & Integration	Paternostro
10/04	F	8:00	Urea and Concentrating Mechanism 2	Paternostro
-	-	9:00	Metabolic Fates of Pyruvate	Shiemke
-	-	10:00	TCA Cycle	Shiemke
-	-	11:00	Active Learning & Integration	Shiemke
10/07	M	8:00	Chronic renal failure /Volume crises (CC)	Schmidt
-	-	9:00	Oxidative Phosphorylation I; Electron transport	Shiemke
-	-	10:00	Oxidative phosphorylation II; ATP Synthesis	Shiemke
-	-	11:00	Physiology review session	Paternostro
10/08	T	8:00	Renal Handling of Hydrogen Ion and Bicarbonate	Paternostro
-	-	9:00	Calcium, phosphate and organic solute handling	Paternostro
-	-	10:00	Oxygen radicals	Shiemke
-	-	11:00	Biochemistry review session	Shiemke
10/09	W	8:00	Mitochondrial Diseases/ Parkinson's Disease	Shiemke
-	-	9:00	Regulation of the Extracellular Fluid	Paternostro
-	-	10:00	Introduction to Gastrointestinal Physiology 1	Connors
-	-	11:00	PBL	-
10/10	Th	-	STUDY DAY FOR EXAM 3 - NO CLASS	-
10/11	F	8:30	EXAMINATION 3	-
10/14	M	8:00	Introduction to Gastrointestinal Physiology 2	Connors
-	-	9:00	Introduction to Gastrointestinal Physiology 3	Connors
-	-	10:00	Lipid digestion	Salati
10/15	T	8:00	Introduction to Gastrointestinal Physiology 4	Connors
-	-	9:00	Fatty acid synthesis	Salati
-	-	10:00	TAG synthesis & storage; Production of VLDL	Salati
10/16	W	8:00	Salivation, Mastication, and Swallowing	Connors
-	-	9:00	Pentose-phosphate shunt & Glycogen synthesis	Hillgartner
-	-	10:00	Glycogen degradation	Hillgartner
-	-	11:00	PBL	-
10/17	Th	8:00	Fatty acid mobilization	Salati
-	-	9:00	Fatty acid oxidation and ketone body formation	Salati
-	-	10:00	Gastric secretion and motility 1	Connors
-	-	11:00	Active Learning & Integration	Connors
10/18	F	8:00	Gastric secretion and motility 2	Connors
-	-	9:00	Fructose & Galactose metabolism; Gluconeogenesis I	Hillgartner
-	-	10:00	Gluconeogenesis II	Hillgartner
-	-	11:00	Active Learning & Integration	Hillgartner/Salati
10/21	M	8:00	Biliary secretion and excretion	Connors
-	-	9:00	Phospholipid/Sphingolipid Synthesis	Salati
-	-	10:00	Prostanoids	Salati

-	-	11:00	Physiology review session	Paternostro
10/22	T	8:00	Pancreatic exocrine secretion	Rajendran
-	-	9:00	Nutrient Digestion and Absorption	Rajendran
-	-	10:00	Cholesterol metabolism	Salati
-	-	11:00	Biochemistry review session	Shiemke
10/23	W	8:00	Amino acid metabolism 1	Hillgartner
-	-	9:00	Amino acid metabolism 2	Hillgartner
-	-	10:00	Lipoprotein metabolism I	Salati
-	-	11:00	PBL	-
10/24	Th	8:00	Small intestine electrolyte & fluid absorption and secretion	Rajendran
-	-	9:00	Lipoprotein metabolism II	Salati
-	-	10:00	Biochemistry of Type-1 and Type-2 Diabetes	Salati
-	-	11:00	Active Learning & Integration	Salati
10/25	F	8:00	Functions of the large intestine	Rajendran
-	-	9:00	Integration of Metabolism	Hillgartner
-	-	10:00	Molecules derived from amino acids	Hillgartner
-	-	11:00	Active Learning & Integration	Hillgartner/Raj
10/28	M	8:00	Purine metabolism	Hillgartner
-	-	9:00	Pyrimidine Metabolism; Deoxyribonucleotide Synthesis	Hillgartner
-	-	10:00	Alcohol Metabolism I	Salati
-	-	11:00	Physiology review session	Paternostro
10/29	T	8:00	Gout (CC)	Labus
-	-	9:00	Alcohol metabolism II	Salati
-	-	10:00	Whole Body Energy Metabolism	Hillgartner
-	-	11:00	Biochemistry review session	Shiemke
10/30	W	8:00	Obesity	Hillgartner
-	-	9:00	Type-2 Diabetes (CC)	Ponte
-	-	10:00	Atherosclerosis (CC)	Balla
-	-	11:00	PBL	-
10/31	Th	-	STUDY DAY FOR EXAM 4 - NO CLASS	-
November 2019				
11/01	F	8:30	EXAMINATION 4	-
11/04	M	8:00	OPEN	-
-	-	9:00	Macronutrients I	Salati
-	-	10:00	Macronutrients II	Salati
11/05	T	8:00	Micronutrients	Salati
-	-	9:00	Introduction to respiration	Paternostro
-	-	10:00	Respiratory mechanics I	Paternostro
11/06	W	8:00	Review of Endocrine; Endocrine control of growth	Goodman
-	-	9:00	Respiratory mechanics II	Paternostro
-	-	10:00	Oxygen Transport	Paternostro
-	-	11:00	PBL	-
11/07	Th	8:00	Thyroid I	Connors
-	-	9:00	Thyroid II	Connors

-	-	10:00	Male Reproduction	Goodman
-	-	11:00	Active Learning & Integration	Paternostro
11/08	F	8:00	Female reproduction I	Goodman
-	-	9:00	Female reproduction II	Goodman
-	-	10:00	CO2 Transport and Respiratory Regulation	Paternostro
-	-	11:00	Active Learning & Integration	Connors/Goodman
-	-	PM	Pulmonary simulation lab	-
11/11	M	8:00	OPEN	-
-	-	9:00	Respiratory mechanics & airway physiology I	Paternostro
-	-	10:00	Respiratory mechanics & airway physiology II	Paternostro
-	-	11:00	Physiology review session	Paternostro
-	-	PM	Pulmonary simulation lab	-
11/12	T	8:00	Non-ventilatory Lung Functions	Paternostro
-	-	9:00	Pregnancy I	Goodman
-	-	10:00	Pregnancy II	Goodman
-	-	11:00	Biochemistry review session	Shiemke
11/13	W	8:00	Teratogens	Hummel
-	-	9:00	Disorders of the Reproductive Tract (CC)	Meter
-	-	10:00	Introduction to Acid-Base	Paternostro
-	-	11:00	PBL	-
11/14	Th	8:00	Adrenal Cortex I	Connors
-	-	9:00	Adrenal Cortex II	Connors
-	-	10:00	Acid-base I	Paternostro
-	-	11:00	Active Learning & Integration	Paternostro
11/15	F	8:00	Acid-base II	Paternostro
-	-	9:00	Temperature regulation I	Connors
-	-	10:00	Temperature regulation II	Connors
-	-	11:00	Active Learning & Integration	Connors
11/18	M	8:00	OPEN	-
-	-	9:00	Physiology of Bone	Goodman
-	-	10:00	Regulation of calcium and phosphate	Goodman
-	-	11:00	Physiology review session	Paternostro
11/19	T	8:00	Adrenal Medulla	Goodman
-	-	9:00	Pulmonary Function Tests (CC)	Weissman
-	-	10:00	Fever (CC)	Khakoo
-	-	11:00	Biochemistry review session	Shiemke
11/20	W	8:00	Exercise I: Energetics	Stauber
-	-	9:00	Exercise II: Adaptation	Stauber
-	-	10:00	Assisted Reproduction Technology (CC)	Vernon
-	-	11:00	PBL	-
11/21	Th	-	STUDY DAY FOR EXAM 5 - NO CLASS	-
11/22	F	8:30	EXAMINATION 5	-
11/23-12/1	-	-	THANKSGIVING RECESS	-

December 2019

12/04	W	-	Biochemistry NBME Shelf Exam, 8-11:00	-
12/10	T	-	Physiology NBME Shelf Exam, 8-11:00	-