

BMS 747 - Foundations For Contemporary Biomedical Research I

Fall Semester (August 16 - October 10, 2017)

Date	Day	Week	Lecture #	Time	Title/Topic	Leader/Lecturer
August 2017						
8/16/2017	W	1	1	9:00 AM	Systems to organs to tissues to cells - an overview	Brock
8/16/2017	W	1	2	10:00 AM	Prokaryotes & Eukaryotes	Siderovski
8/17/2017	Th	1	3	9:00 AM	Eukaryotic Cells & Organelles	Schaller
8/17/2017	Th	1	4	10:00 AM	Eukaryotic Cells & Organelles	Schaller
8/18/2017	F	1	5	9:00 AM	Water, thermodynamics	Gunther
8/18/2017	F	1	6	10:00 AM	How to design an experiment	Faculty
8/18/2017	-	-	-	-	Take home assignment distributed	-
8/21/2017	-	-	-	-	Take home assignment due	-
8/21/2017	M	2	-	9:00 AM	NO CLASS - READING MORNING	-
8/21/2017	M	2	-	10:00 AM	NO CLASS - READING MORNING	-
8/22/2017	Tu	2	7	9:00 AM	Cellular fuel and raw materials - metabolism	Gunther
8/22/2017	Tu	2	8	10:00 AM	Cellular fuel and raw materials - metabolism	Gunther
8/23/2017	W	2	9	9:00 AM	Primary and secondary protein structure	Gunther
8/23/2017	W	2	10	10:00 AM	Higher order protein structure	Gunther
8/24/2017	Th	2	11	9:00 AM	Membranes composition overview	Ramamurthy
8/24/2017	Th	2	12	10:00 AM	Passive Diffusion	Huber
8/25/2017	F	2	13	9:00 AM	Protein structure/function	Gunther
8/25/2017	F	2	14	10:00 AM	Allostery	Gunther
8/28/2017	M	3	-	9:00 AM	NO CLASS - OPTIONAL REVIEW	FACULTY
8/28/2017	M	3	-	10:00 AM	NO CLASS - OPTIONAL REVIEW	FACULTY
8/29/2017	Tu	3	15	9:00 AM	Membrane organization - proteins and carbohydrates I	Ramamurthy
8/29/2017	Tu	3	16	10:00 AM	Membrane organization - proteins and carbohydrates II	Ramamurthy
8/30/2017	W	3	17	9:00 AM	Facilitative diffusion	Huber
8/30/2017	W	3	18	10:00 AM	Enzyme catalysis strategies	Smith
8/31/2017	Th	3	19	9:00 AM	Catalysis and Kinetics - Michaelis-Menton	Smith
8/31/2017	Th	3	20	10:00 AM	Kinetics and inhibitors	Smith
September 2017						
9/1/2017	F	3	-	9:00 AM	STUDENT PRESENTATIONS	FACULTY
9/1/2017	F	3	-	10:00 AM	STUDENT PRESENTATIONS	FACULTY
9/4/2017	M	-	-	-	LABOR DAY	-

9/5/2017	Tu	4	21	9:00 AM	Allosteric and multisubunit kinetics	Smith
9/5/2017	Tu	4	22	10:00 AM	Regulation of enzyme activity	Smith
9/6/2017	W	4	23	9:00 AM	Anaerobic bioenergetics	Gunther
9/6/2017	W	4	24	10:00 AM	Aerobic bioenergetics	Gunther
9/7/2017	Th	4	25	9:00 AM	Biochemical Redox reactions	Gunther
9/7/2017	Th	4	26	10:00 AM	Cytoskeleton - microtubules and intermediate filaments	Schaller
9/8/2017	F	4	-	-	NO CLASS - OPTIONAL REVIEW	FACULTY
9/8/2017	F	4	-	-	NO CLASS - OPTIONAL REVIEW	FACULTY
9/11/2017	M	5	-	9:00 AM	BMS747 MIDTERM	-
9/11/2017	M	5	-	10:00 AM	Lectures 7-25	-
9/12/2017	Tu	5	27	9:00 AM	Cytoskeleton - microfilaments	Weed
9/12/2017	Tu	5	28	10:00 AM	Dynamics & regulation	Weed
9/13/2017	W	5	29	9:00 AM	Molecular motors	Schaller
9/13/2017	W	5	30	10:00 AM	Cytoskeleton drugs	Schaller/Weed
9/14/2017	Th	5	31	9:00 AM	Protein and vesicular trafficking	Ramamurthy
9/14/2017	Th	5	32	10:00 AM	Exocytosis and secretion	Ramamurthy
9/15/2017	F	5	33	9:00 AM	Endocytosis	Ramamurthy
9/15/2017	F	5	34	10:00 AM	Pumps & channels 1	Huber
9/18/2017	M	6	-	9:00 AM	NO CLASS - OPTIONAL REVIEW	FACULTY
9/18/2017	M	6	-	10:00 AM	NO CLASS - OPTIONAL REVIEW	FACULTY
9/19/2017	Tu	6	35	9:00 AM	Pumps & channels 2	Huber
9/19/2017	Tu	6	36	10:00 AM	Excitable cells and unidirectional conduction 1	Hardy
9/20/2017	W	6	37	9:00 AM	Excitable cells and unidirectional conduction 2	Hardy
9/20/2017	W	6	38	10:00 AM	Synaptic transmission	Hardy
9/21/2017	Th	6	39	9:00 AM	Calcium homeostasis	Huber
9/21/2017	Th	6	40	10:00 AM	Membrane bound enzymes	Huber
9/22/2017	F	6	41	9:00 AM	Pharmacological targeting of channels and transporters I	Huber
9/22/2017	F	6	42	10:00 AM	Pharmacological targeting of channels and transporters II	Huber
9/25/2017	M	7	-	9:00 AM	NO CLASS - OPTIONAL REVIEW	FACULTY
9/25/2017	M	7	-	10:00 AM	NO CLASS - OPTIONAL REVIEW	FACULTY
9/26/2017	Tu	7	-	9:00 AM	BMS747 MIDTERM	-
9/26/2017	Tu	7	-	10:00 AM	Lectures 26-42	-
9/27/2017	W	7	43	9:00 AM	General Principles - modes, ligands, receptors, etc.	Schaller
9/27/2017	W	7	44	10:00 AM	Signal Initiation - Ligand and Membrane Receptors	Schaller

9/28/2017	T	7	45	9:00 AM	Signal Propagation - Kinases and GTP Binding Proteins	Schaller
9/28/2017	T	7	46	10:00 AM	Lipids and Second Messengers	Schaller
9/29/2017	F	7	47	9:00 AM	Signaling to the Nucleus	Schaller
9/29/2017	F	7	48	10:00 AM	Lipids and Steroids as ligands - signaling	Siderovski
October 2017						
10/2/2017	M	8	-	9:00 AM	NO CLASS - OPTIONAL REVIEW	FACULTY
10/2/2017	M	8	-	10:00 AM	NO CLASS - OPTIONAL REVIEW	FACULTY
10/3/2017	Tu	8	-	9:00 AM	STUDENT PRESENTATIONS	FACULTY
10/3/2017	Tu	8	-	10:00 AM	STUDENT PRESENTATIONS	FACULTY
10/4/2017	W	8	49	9:00 AM	Control of cell cycle - molecular signaling pathways	Frisch
10/4/2017	W	8	50	10:00 AM	Control of cell cycle - molecular signaling pathways	Frisch
10/5/2017	Th	8	51	9:00 AM	Senescence and aging	Frisch
10/5/2017	Th	8	52	10:00 AM	Stem cells	Weed
10/6/2017	F	8	53	9:00 AM	Control of cell death - molecular signaling pathways	Frisch
10/6/2017	F	8	54	10:00 AM	Control of cell death - molecular signaling pathways	Frisch
10/9/2017	M	9	-	9:00 AM	NO CLASS - OPTIONAL REVIEW	FACULTY
10/9/2017	M	9	-	10:00 AM	NO CLASS - OPTIONAL REVIEW	FACULTY
10/10/2017	Tu	9	-	9:00 AM	BMS747 MIDTERM	-
10/10/2017	Tu	9	-	10:00 AM	Lectures 43-54	-