

CELL & MOLECULAR BIOLOGY (SCID500) Credit 3(3-0-6)**COURSE SCHEDULE****June 23-Aug 3, 2023****Faculty of Science, Mahidol University**

DATE	TIME		TOPIC	Room	LECTURER
Fri Jun 23	09.00-09.30		Introduction to the Course	B401	Kittisak
	09.30-11.00		How to Explore the Cell/Group Activities	B401	Patompon
<u>Unit I : Life and Information Flow in Cell</u>					
Mon Jun 26	09.00-10.00	L1	Water and Life	B401	Jirundon
	10.00-12.00	L2,3	Biomolecules of Cells	B401	Jirundon
Tu Jun 27	09.00-11.00	L4,5	Chemical Nature of Genetic Materials & DNA Replication	B401	Laran
	11.00-12.00		Questions & Answers	B401	Jirundon
Wed Jun 28			Self-study		
Thu Jun 29	09.00-11.00	L6,7	Gene Expression	B401	Laran
	11.00-12.00	SL1	Pathogenesis of chloride channelopathies and its implication in drug development	B401	Chatchai
Fri Jun 30	09.00-11.00	L8,9	Gene Regulation	B401	Laran
Mon July 3	09.00-11.00	L10,11	Gene Technology	B401	Laran
	11.00-12.00		Questions & Answers	B401	Laran
Tu Jul 4			Self-study		
Wed Jul 5	09.00-12.00		EXAM Unit I (L1-11) (55 Points)	Room MDL3	
<u>Unit II : Energy Flow in Biosystem</u>					
Thu Jul 6	09.00-11.00	L12,13	The Catalysts of Life	B401	Ruchanok
	11.00-12.00	L14	Bioenergetics	B401	Ruchanok
Fri Jul 7	09.00-10.00	L15	Chemical Metabolisms	B401	Sittinan
	10.00-11.00	L16	Chemotrophic & Phototrophic Energy Metabolisms	B401	Sittinan
Mon Jul 10	09.00-10.00		Questions & Answers	Online	Ruchanok
	10.00-11.00				Sittinan
<u>Unit III : Cell Structure and Function</u>					
Tu Jul 11	09.00-11.00	L17,18	Membrane: Structure and Transport Function	B401	Ratchaneevan
Wed Jul 12			Self-study		
Thu Jul 13	09.00-11.00	L19,20	ER, Golgi and lysosomes	B401	Puey
	11.00-12.00	L21	Mitochondria, chloroplast and peroxisomes	B401	Amornrat
Fri Jul 14	09.00-11.00	L22,23	Cytoskeleton	B401	Puey
	11.00-12.00	L24	Nucleus	B401	Amornrat
Mon Jul 17	09.00-10.00		Questions & Answers	Online	Ratchaneevan
	10.00-11.00				Puey
	11.00-12.00				Amornrat

DATE	TIME		TOPIC	Room	LECTURER
Tu Jul 18	09.00-12.00		EXAM Unit II-III (L12-24) (65 Points)	Room MDL3	
Wed Jul 19			Self-study		
<u>Unit IV : Cell Signaling</u>					
Thu Jul 20	09.00-11.00	L25,26	Electrical Signaling in Excitable Cells	B401	Ratchaneevan
Fri Jul 21	09.00-12.00	L27,28,29	Cell Surface Receptors and Intracellular Signal Transduction	B401	Arthit
Mon Jul 24	09.00-11.00	L30,31	Cell Adhesion and Extracellular Substances	B401	Krai
	11.00-12.00	SL2	The role of free radicals in cancer progression: invasion and metastasis	B401	Prasit
Tu Jul 25	09.00-10.00		Questions & Answers	Online	Krai
	10.00-11.00				Ratchaneevan
<u>Unit V : Cell Division, Cellular Differentiation, Cell Death and Development</u>					
Wed Jul 26	09.00-11.00	L32,33	Cell Division	B401	Rutaiwan
	11.00-12.00	L34	Cell Cycle & Cell Death	B401	Rutaiwan
Thu Jul 27	09.00-11.00	L35,36	Cell Development	B401	Somyoth
	11.00-12.00	L37	Cell Differentiation	B401	Somyoth
Fri Jul 28			Self-study (วันพระชนมพรรษา ๖.10)		
Mon Jul 31	09.00-10.00		Questions & Answers	Online	Arthit
	10.00-11.00				Rutaiwan
	11.00-12.00				Somyoth
Tue Aug 1			Self-study (วันอาสาฬหบูชา)		
Wed Aug 2			Self-study (วันเข้าพรรษา)		
Thu Aug 3	09.00-12.00		EXAM Unit IV-V (L25-37) (65 Points)	Room MDL3	