

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		Kittisak
	09.30-11.00		How to Explore the Cell/Group Activities		
<u>Unit I : Life and Information Flow in Cell</u>					
Mon Jun 26	09.00-10.00	L1	Water and Life		Jirundon
	10.00-12.00	L2,3	Biomolecules of Cells		Jirundon
Tu Jun 27	09.00-11.00	L4,5	Chemical Nature of Genetic Materials & DNA Replication		Laran
	11.00-12.00		Questions & Answers		Jirundon
Wed Jun 28			Self-study		
Thu Jun 29	09.00-11.00	L6,7	Gene Expression		Laran
Fri Jun 30	09.00-11.00	L8,9	Gene Regulation		Laran
	11.00-12.00	SL1	Special lecture 1		
Mon July 3	09.00-11.00	L10,11	Gene Technology		Laran
	11.00-12.00		Questions & Answers		Laran
Tu Jul 4			Self-study		
Wed Jul 5	09.00-12.00		EXAM Unit I (L1-11) (55 Points)	Room	
<u>Unit II : Energy Flow in Biosystem</u>					
Thu Jul 6	09.00-11.00	L12,13	The Catalysts of Life		Ruchanok
	11.00-12.00	L14	Bioenergetics		Ruchanok
Fri Jul 7	09.00-10.00	L15	Chemical Metabolisms		Sittinan
	10.00-11.00	L16	Chemotrophic & Phototrophic Energy Metabolisms		Sittinan
Mon Jul 10	09.00-10.00		Questions & Answers		Ruchanok
	10.00-11.00		Questions & Answers		Sittinan
<u>Unit III : Cell Structure and Function</u>					
Tu Jul 11	09.00-11.00	L17,18	Membrane: Structure and Transport Function		Ratchaneevan
Wed Jul 12			Self-study		
Thu Jul 13	09.00-11.00	L19,20	ER, Golgi and lysosomes		Puey
	11.00-12.00	L21	Mitochondria, chloroplast and peroxisomes		Amornrat
Fri Jul 14	09.00-11.00	L22,23	Cytoskeleton		Puey
	11.00-12.00	L24	Nucleus		Amornrat
Mon Jul 17	09.00-10.00		Questions & Answers		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	
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		Ratchaneevan
Fri Jul 21	09.00-12.00	L27,28,29	Cell Surface Receptors and Intracellular Signal Transduction		Arthit
Mon Jul 24	09.00-11.00	L30,31	Cell Adhesion and Extracellular Substances		Krai
	11.00-12.00	SL2	Special lecture 2		Prasit
Tu Jul 25	09.00-10.00		Questions & Answers		Ratchaneevan
	10.00-11.00		Questions & Answers		Krai
<u>Unit V : Cell Division, Cellular Differentiation, Cell Death and Development</u>					
Wed Jul 26	09.00-11.00	L32,33	Cell Division		Rutaiwan
	11.00-12.00	L34	Cell Cycle & Cell Death		Rutaiwan
Thu Jul 27	09.00-11.00	L35,36	Cell Development		Somyoth
	11.00-12.00	L37	Cell Differentiation		Somyoth
Fri Jul 28			Self-study (วันพระชนมพรรษา ร.10)		
Mon Jul 31	09.00-10.00		Questions & Answers		Arthit
	10.00-11.00		Questions & Answers		Rutaiwan
	11.00-12.00		Questions & Answers		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	