

# Course Online

CELL & MOLECULAR BIOLOGY (SCID500) Credit 3(3-0-6)

## COURSE SCHEDULE

June 28-Aug 2, 2021

Faculty of Science, Mahidol University

DATE	TIME		TOPIC	LECTURER
<u>Unit I : Life and Information Flow in Cell</u>				
Mon Jun 28	09.00-09.30		Introduction to the Course	Kittisak
	09.30-10.30	L1	Water and Life	Jirundon/ Danaya
Tu Jun 29	09.00-11.00	L2,3	Biomolecules of Cells	Jirundon/ Danaya
Wed Jun 30	09.00-11.00	L4,5	Chemical Nature of Genetic Materials & DNA Replication	Laran/ Mikhail
Thu Jul 1	09.00-11.00	L6,7	Gene Expression	Laran/ Mikhail
	11.00-12.00	SL1	Special Lecture 1	Chatchai
Fri Jul 2	09.00-11.00	L8,9	Gene Regulation	Laran/ Mikhail
	11.00-12.00		Questions & Answers	Jirundon
Mon Jul 5	09.00-11.00	L10,11	Gene Technology	Laran/ Mikhail
	11.00-12.00		Questions & Answers	Laran
Tu Jul 6			Self-study	
<b>Wed Jul 7</b>	<b>09.00-12.00</b>		<b>EXAM Unit I (L1-11) (55 Points)</b>	
<u>Unit II : Energy Flow in Biosystem</u>				
Thu Jul 8	09.00-11.00	L12,13	The Catalysts of Life	Ruchanok/ Jirundon
	11.00-12.00	L14	Bioenergetics	Ruchanok/ Jirundon
Fri Jul 9	09.00-10.00	L15	Chemical Metabolisms	Sittinan/ Ruchanok
	10.00-11.00	L16	Chemotrophic & Phototrophic Energy Metabolisms	Sittinan/ Ruchanok
<u>Unit III : Cell Structure and Function</u>				
Mon Jul 12	09.00-11.00	L17,18	Membrane: Structure and Transport Function	Jonggonnee/ Witchuda
Tu Jul 13	09.00-11.00	L19,20	ER, Golgi and lysosomes	Puey/ Laran
	11.00-12.00	L21	Mitochondria, chloroplast and peroxisomes	Amornrat/ Laran
Wed Jul 14	09.00-11.00	L22,23	Cytoskeleton	Puey/ Amornrat
	11.00-12.00	L24	Nucleus	Amornrat/ Puey
Thu Jul 15	09.00-10.00		Questions & Answers	Ruchanok
	10.00-11.00			Sittinan
Fri Jul 16	09.00-10.00		Questions & Answers	Puey
	10.00-11.00			Amornrat
	11.00-12.00			Jonggonnee
<b>Mon Jul 19</b>	<b>09.00-12.00</b>		<b>EXAM Unit II-III (L12-24) (65 Points)</b>	
<u>Unit IV : Cell Signaling</u>				
Tu Jul 20	09.00-11.00	L25,26	Electrical Signaling in Excitable Cells	Jonggonnee/ Witchuda
Wed Jul 21	09.00-12.00	L27,28, 29	Cell Surface Receptors and Intracellular Signal Transduction	Arthit/ Nattapon

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Thu Jul 22	09.00-11.00	L30,31	Cell Adhesion and Extracellular Substances	Krai/ Puey
	11.00-12.00	SL2	Special Lecture 2	Prasit
<b>Unit V : Cell Division, Cellular Differentiation, Cell Death and Development</b>				
Fri Jul 23	09.00-11.00	L32,33	Cell Division	Rutaiwan/ Rapee
	11.00-12.00	L34	Cell Cycle & Cell Death	Rutaiwan/ Rapee
Mon Jul 26			Self-study (ชดเชยวันอาสาฬหบูชา)	
Tu Jul 27			Self-study (วันหยุด ครม.)	
Wed Jul 28			Self-study (วันพระชนมพรรษา ร.10)	
Thu Jul 29	09.00-11.00	L35,36	Cell Development	Somyoth/ Rapee
	11.00-12.00	L37	Cell Differentiation	Somyoth/ Rapee
Fri Jul 30	09.00-10.00		Questions & Answers	Jonggonnee
	10.00-11.00			Arhit
	11.00-12.00			Krai
	13.00-14.00			Rutaiwan
	14.00-15.00			Somyoth
<b>Mon Aug 2</b>	<b>09.00-12.00</b>		<b>EXAM Unit IV-V (L25-37) (65 Points)</b>	