

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

COURSE SCHEDULE

June 27-Aug 2, 2019

Faculty of Science, Mahidol University

DATE	TIME		TOPIC	Room	LECTURER
Thu June 27	09.00-09.30		Introduction to the Course	L05	Kittisak
	09.30-11.30		How to Explore the Cell/Group Activities	L05	Patompon
Fri June 28			Self-study		
<u>Unit I : Life and Information Flow in Cell</u>					
Mon July 1	09.00-10.00	L1	Water and Life	L05	Jirundon/ Danaya
	10.00-12.00	L2,3	Biomolecules of Cells	L05	Jirundon/ Danaya
Tu July 2	09.00-11.00	L4,5	Chemical Nature of Genetic Materials & DNA Replication	L05	Laran/ Mikhail
	11.00-12.00	SL1	Abnormal chloride channel functions & their roles in the pathogenesis of diseases	L05	Chatchai
Wed July 3	09.00-11.00	L6,7	Gene Expression	L05	Laran/ Mikhail
Thu July 4	09.00-11.00	L8,9	Gene Regulation	L05	Laran/ Mikhail
	11.00-12.00		Questions & Answers		Jirundon
Fri July 5	09.00-11.00	L10,11	Gene Technology	L05	Laran/ Mikhail
	11.00-12.00		Questions & Answers		Laran
Mon July 8	09.00-12.00		EXAM Unit I (L1-11) (55 Points)	Room MDL 3-4	
<u>Unit II : Energy Flow in Biosystem</u>					
Tue July 9	09.00-11.00	L12,13	The Catalysts of Life	L05	Ruchanok/ Jirundon
	11.00-12.00	L14	Bioenergetics	L05	Ruchanok/ Jirundon
Wed July 10	09.00-10.00	L15	Chemical Metabolisms	L02	Ruchanok/ Jirundon
	10.00-11.00	L16	Chemotrophic & Phototrophic Energy Metabolisms	L02	Ruchanok/ Jirundon
<u>Unit III : Cell Structure and Function</u>					
Thu July 11	09.00-11.00	L17,18	Membrane: Structure and Transport Function	L02	Jonggonnee/ Witchuda
Fri July 12			Self-study		
Mon July 15	09.00-11.00	L19,20	ER, Golgi and lysosomes	L02	Puey/ Laran
	11.00-12.00	L21	Mitochondria, chloroplast and peroxisomes	L02	Amornrat/ Laran
Tu July 16			Self-study (Asarnha Bucha Day)		
Wed July 17			Self-study (Buddhist Lent Day)		
Thu July 18	09.00-11.00	L22,23	Cytoskeleton	L02	Puey/ Amornrat
	10.00-11.00	L24	Nucleus	L02	Amornrat/ Puey
Fri July 19	09.00-09.40		Questions & Answers	L02	Ruchanok
	09.40-10.20				Jonggonnee
	10.20-11.00				Puey
	11.00-11.40				Amornrat

DATE	TIME		TOPIC	Room	LECTURER
Mon July 22	09.00-12.00		EXAM Unit II-III (L12-24) (65 Points)	Room MDL 3-4	
<u>Unit IV : Cell Signaling</u>					
Tu July 23	09.00-11.00	L25,26	Electrical Signaling in Excitable Cells	L02	Jonggonnee/ Witchuda
Wed July 24	09.00-12.00	L27,28,29	Cell Surface Receptors and Intracellular Signal Transduction	L02	Arthit/ Nattapon
Thu July 25	09.00-11.00	L30,31	Cell Adhesion and Extracellular Substances	L02	Krai/ Puey
	11.00-12.00	SL2	Oxidative stress and cancer	L02	Prasit
<u>Unit V : Cell Division, Cellular Differentiation, Cell Death and Development</u>					
Fri July 26	09.00-11.00	L32,33	Cell Division	L04	Rutaiwan/ Rapee
	11.00-12.00	L34	Cell Cycle & Cell Death	L04	Rutaiwan/ Rapee
Mon July 29			Self-study (Substitution for H.M. King Maha Vajiralongkorn's Birthday)		
Tu July 30	09.00-11.00	L35,36	Cell Development	L02	Somyoth/ Rapee
	11.00-12.00	L37	Cell Differentiation	L02	Somyoth/ Rapee
Wed July 31	09.00-09.30		Questions & Answers	L02	Krai
	09.30-10.00				Jonggonnee
	10.00-10.30				Arthit
	10.30-11.00				Rutaiwan
	11.00-11.30				Somyoth
Thu Aug 1			Self-study		
Fri Aug 2	09.00-12.00		EXAM Unit IV-V (L25-37) (65 Points)	Room MDL 3-4	