

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

**COURSE SCHEDULE**

**Jul 8-Aug 18, 2014**

**Faculty of Science, Mahidol University**

<b>DATE</b>	<b>TIME</b>		<b>TOPIC</b>	<b>Room</b>	<b>LECTURER</b>
Tue 8 Jul	0830-0900		Registration		
	0900-1000		Introduction to Course	L02	Sukumal/ Kittisak
	1000-1200		How to Explore the Cell/Group Activities	L02	Rapee/ Jirundon/ Danaya Laran/ Amornrat/ Waraporn/ Mathurose/ Pimchai/ Somyoth/ Jonggonnee/ Nateetip/ Rutaiwan/ Wattana/ Krai
	1300-1500		Self-study	MDL 1-2	
<b>Unit I : Life and Information Flow in Cell</b>					
Wed 9 Jul	0900-1000	L1	Water and Life	L04	Jirundon/ Danaya
	1000-1200	L2,3	Biomolecules of Cells	L04	Jirundon/ Danaya
	1300-1500		Self-study	MDL 1-2	
Thu 10 Jul	0900-1100	L4,5	Chemical Nature of Genetic Materials & DNA Replication	L02	Laran/ Waraporn
	1300-1500		Self-study	MDL 1-2	
Fri 11 Jul	Holiday (Asarnha Bucha Day)				
Mon 14 Jul	Holiday (Buddhist Lent Day)				
Tue 15 Jul	0900-1100	L6,7	Gene Expression	L02	Laran/ Waraporn
	1300-1500		Self-study	MDL 1-2	
Wed 16 Jul	0900-1100	L8,9	Gene Regulation	L02	Laran / Mathurose
	1300-1500		Self-study	MDL 1-2	
Thu 17 Jul	0900-1100	L10,11	Gene Technology	L02	Laran / Mathurose
	1300-1500		Self-study	MDL 1-2	
Fri 18 Jul	0900-1200	Q&A	Questions & Answers	L02	Jirundon/ Laran
	1300-1500		Self-study	MDL 1-2	
Mon 21 Jul	0900-1200	EXAM Unit I (L1-11) (77 points)			MDL 1-4
Tue 22 Jul	0900-1200	TBL	TBL	L02	Kittisak
	1300-1500		Self-study	MDL 1-2	
<b>Unit II : Energy Flow in Biosystem (Ch 3,8,11)</b>					
Wed 23 Jul	0900-1100	L12,13	The Catalysts of Life	L02	Pimchai/ Jirundorn
	1100-1200	L14	Bioenergetics	L02	Pimchai/ Jirundorn
	1300-1500		Self-study	MDL 1-2	
Thu 24 Jul	0900-1000	L15	Chemical Metabolisms	L02	Pimchai/ Jirundorn
	1000-1100	L16	Chemotrophic & Phototrophic Energy Metabolisms	L02	Pimchai/ Jirundorn
	1300-1500		Self-study	MDL 1-2	

DATE	TIME		TOPIC	Room	LECTURER
Fri 25 Jul	0900-1200	Q&A	Questions & Answers	L02	Pimchai
	1300-1500		Self-study	MDL 1-2	
Mon 28 Jul	0900-1100		EXAM Unit II (L12-16) (35 points)		
<b>Unit III : Cell Structure and Function (Ch 9,10,12,13,14)</b>					
Tue 29 Jul	0900-1100	L17,18	Membrane: Structure and Transport Function	L02	Jonggonnee/ Nateetip
	1300-1500		Self-study	MDL 1-2	
Wed 30 Jul	0900-1000	L19	Nucleus	L02	Amornrat/ Wattana
	1000-1200	L20,21	ER, Golgi and lysosomes	L02	Laran/ Wattana
	1300-1500		Self-study	MDL 1-2	
Thu 31 Jul	0900-1030	L22	Mitochondrial, chloroplast and peroxisomes	L02	Amornrat/Laran
	1030-1130	Q&A	Questions & Answers	L02	Jonggonnee
	1300-1500		Self-study	MDL 1-2	
Fri 1 Aug	0900-1030	L23,L24	Cytoskeleton	L02	Amornrat/ Wattana
	1030-1200		Self-study	L02	
	1300-1500	Q&A	Questions & Answers	L02	Wattana/ Laran/ Amornrat
Mon 4 Aug	0900-1100		EXAM Unit III (L17-24) (56 points)		
<b>Unit IV : Cell Signaling (Ch 14,15)</b>					
Tue 5 Aug	0900-1100	L25,26	Cell Adhesion and Extracellular Substances	L02	Krai/ Wattana
	1300-1500		Self-study	MDL 1-2	
Wed 6 Aug	0900-1100	L27,28	Electrical Signaling in Excitable Cells	L02	Jonggonnee/ Nateetip
	1300-1500		<u>Orientation for Graduate Students</u>	<u>L02</u>	
Thu 7 Aug	0900-1200	L29,30,31	Cell Surface Receptors and Intracellular Signal Transduction	L02	Nateetip/ Jonggonnee
	1300-1500	SL1	<u>Special Lecture at Conference Room, Stang Mongkolsuk Building</u>		
Fri 8 Aug	0900-1030	SL2	Special Lecture: Cell Technologies: Opportunities and Innovations	L02	Sansanee
	1030-1200	Q&A	Questions & Answers	L02	Krai/ Jonggonnee/ Nateetip
Mon 11 Aug			Holiday		
Tue 12 Aug			Holiday (H.M. The Queen's Birthday)		
Wed 13 Aug	0900-1100		EXAM Unit IV (L25-31) (49 points)		
<b>Unit V : Cell Division, Cellular Differentiation, Cell Death and Development (Ch 16,17)</b>					
Thu 14 Aug	0900-1100	L32,33	Cell Division	L02	Rutaiwan/ Rapee
	1100-1200	L34	Cell Cycle & Cell Death	L02	Rutaiwan/ Rapee
	1300-1500		Self-study	MDL 1-2	
Fri 15 Aug	0900-1030	L35,36	Cell Development	L02	Somyoth/ Rapee
	1030-1200	L37	Cell Differentiation	L02	Somyoth/ Rapee
	1300-1400	Q&A	Questions & Answers	L02	Rutaiwan/ Somyoth
Mon 18 Aug	0900-1100		EXAM Unit V (L32-37) (42 points)		