

(Draft)

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

COURSE SCHEDULE

May 8 – Jun 14, 2013

Faculty of Science, Mahidol University

DATE	TIME		TOPIC	Room	LECTURER
Wed 8 May	0830-0900		Registration		
	0900-0930		Introduction to Course		Sukumal
	0930-1200		How to Explore the Cell/Group Activities		Sukumal/ Rapee/ Jirundon/ Chutima/ Laran/ Waraporn/ Mathurose/ Soraya/ Pimchai/ Jonggonnee/ Nateetip/ Wattana/ Amornrat/ Rutaiwan
	1300-1500		Small Group (Self-study)		
<u>Unit I : Life and Information Flow in Cell</u>					
Thu 9 May	0900-1000	L1	Water and Life		Chutima/ Jirundon
	1000-1200	L2,3	Biomolecules of Cells		Chutima/ Jirundon
	1300-1500		Small Group (Self-study)		
Fri 10 May	0900-1100	L4,5	Chemical Nature of Genetic Materials & DNA Replication		Laran/ Waraporn
	1300-1500		Small Group (Self-study)		
Mon 13 May	0900-1100	L6,7	Gene Expression		Laran/ Waraporn
	1300-1500		Small Group (Self-study)		
Tue 14 May	0900-1100	L8,9	Gene Regulation		Mathurose/ Laran
	1300-1500		Small Group (Self-study)		
Wed 15 May	0900-1100	L10,11	Gene Technology		Mathurose/ Laran
	1300-1500		Small Group (Self-study)		
Thu 16 May	0900-1200	Q&A	Questions & Answers		Laran/ Chutima/ Mathurose
	1300-1500		Small Group (Self-study)		
Fri 17 May			Self-study		
Mon 20 May	0900-1200		EXAM Unit I (L1-11) (77 points)		
<u>Unit II : Energy Flow in Biosystem</u>					
Tue 21 May	0900-1100	L12,13	The Catalysts of Life		Pimchai/ Jirundorn
	1100-1200	L14	Bioenergetics		Pimchai/ Jirundorn
	1300-1500		Small Group (Self-study)		
Wed 22 May	0900-1000	L15	Chemical Metabolisms		Pimchai/ Jirundorn
	1000-1100	L16	Chemotrophic & Phototrophic Energy Metabolisms		Pimchai/ Jirundorn
	1300-1500		Small Group (Self-study)		
Thu 23 May	0900-1200	Q&A	Questions & Answers		Pimchai
	1300-1500		Small Group (Self-study)		
Fri 24 May			Visakha Bucha Day		
Mon 27 May	0900-1100		EXAM Unit II (L12-16) (35 points)		

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<u>Unit III : Cell Structure and Function</u>					
Tue 28 May	0900-1100	L17,18	Membrane: Structure and Transport Function		Jonggonnee/ Nateetip
	1300-1500		Small Group (Self-study)		
Wed 29 May	0900-1000	L19	Nucleus		Amornrat/ Wattana
	1000-1200	L20,21	ER, Golgi and lysosomes		Laran/ Wattana
	1300-1500		Small Group (Self-study)		
Thu 30 May	0900-1030	L22	Mitochondrial, chloroplast and peroxisomes		Amornrat/Laran
	1030-1200	L23,24	Cytoskeleton		Wattana/Amornrat
	1300-1500		Small Group (Self-study)		
Fri 31 May	0900-1200	Q&A	Questions & Answers		Jonggonnee/ Wattana/ Laran/ Amornrat
	1300-1500		Small Group (Self-study)		
Mon 3 Jun	0900-1200		EXAM Unit III (L17-24) (56 points)		
<u>Unit IV : Cell Signaling</u>					
Tue 4 Jun	0900-1100	L25,26	Cell Adhesion and Extracellular Substances		Soraya/ Wattana
	1300-1500		Small Group (Self-study)		
Wed 5 Jun	0900-1100	L27,28	Electrical Signaling in Excitable Cells		Jonggonnee/ Nateetip
	1300-1500		Small Group (Self-study)		
Thu 6 Jun	0900-1200	L29,30,31	Cell Surface Receptors and Intracellular Signal Transduction		Nateetip/ Jonggonnee
	1300-1500		Small Group (Self-study)		
Fri 7 Jun	0900-1200	Q&A	Questions & Answers		Soraya / Jonggonnee / Nateetip
	1300-1500		Small Group (Self-study)		
Mon 10 Jun	0900-1200		EXAM Unit IV (L25-31) (49 points)		
<u>Unit V : Cell Division, Cellular Differentiation, Cell Death and Development (Ch 16,17)</u>					
Tue 11 Jun	0900-1100	L32,33	Cell Division		Rutaiwan/ Rapee
	1100-1200	L34	Cell Cycle & Cell Death		Rutaiwan/ Rapee
	1330-1500	SL1	Special Lecture: Nanoimaging of cell and biomolecules		Prasert Sobhon
Wed 12 Jun	0900-1030	L35,36	Cell Development		Rapee/ Rutaiwan
	1030-1200	L37	Cell Differentiation		Rapee/ Rutaiwan
	1300-1500		Small Group (Self-study)		
Thu 13 Jun	0900-1100	Q&A	Questions & Answers		Rutaiwan/ Rapee
	1300-1500		Small Group (Self-study)		
Fri 14 Jun	0900-1100		EXAM Unit V (L32-37) (42 points)	MDL1-4	