

COURSE SCHEDULE
SCID506 Concept of Molecular Biosciences Credit 2(2-0-4)
Aug 14-Sep 25, 2020
Faculty of Science, Mahidol University

Period	DATE	TIME	TOPIC	LECTURER
Unit I Chemical principles in biological science				
	F 14 Aug	0900-1000	Course Orientation (Mandatory-everyone must attend.)	Live (Webex) Jirundon
1		1000-1100	pH, pKa, and ionization	Live (Webex) Jirundon/ Danaya
2		1100-1200	Bonding, force, interaction, and stereochemistry of molecules	VDO Danaya/ Jirundon
3	M 17 Aug	0900-1000	Bonding, force, interaction, and stereochemistry of molecules	VDO Danaya/ Jirundon
4,5		1000-1200	Protein structure and function	VDO Danaya/ Jirundon
		1300-1500	Questions & Answers for Unit I	Live (Webex) Jirundon & Danaya
W 19 Aug 0900-1200 EXAM I (Unit I) 50 point				
Unit II Biomolecules				
6,7	F 21 Aug	0900-1100	Thermodynamics and biological oxidation	Kittisak/ Ruchanok
8,9	M 24 Aug	0900-1100	Enzyme kinetics and catalysis	Ruchanok/ Kittisak
		1100-1200	Special topic for Unit II: Mechanism and regulation of transport across biological membranes	Laran
		1300-1400	Questions & Answers for Unit II	Kittisak
10	W 26 Aug	0900-1000	Lipid and biomembrane	Jirundon/ Danaya
11		1000-1100	Carbohydrate and glycobiology	Jirundon/ Danaya
		1100-1200	Questions & Answers for Unit II	Ruchanok
		1300-1400	Questions & Answers for Unit II	Jirundon
Unit III Chemical and energy metabolism				
12,13	F 28 Aug	0900-1100	Metabolism of carbohydrate	Sarawut/ Laran
M 31 Aug 0900-1200 EXAM II (Unit II) 60 point				
14	W 2 Sep	1300-1400	Oxidative Phosphorylation	Kittisak/ Ruchanok
15		1400-1500	Photophosphorylation, light & life	Kittisak/ Ruchanok
16,17	F 4 Sep	0900-1100	Metabolism of lipids	Sarawut/ Laran
18,19	M 7 Sep	0900-1100	Metabolism of nucleic acid and amino acid	Laran/ Jamorn
		1100-1200	Questions & Answers for Unit III	Laran
		1300-1400	Questions & Answers for Unit III	Kittisak
	W 9 Sep	0900-1000	Special topic for Unit III: Cell Metabolism & regulation	Sarawut
		1000-1100	Questions and Answers for Unit III	Sarawut
	F 11 Sep		Self-study	
M 14 Sep 0900-1200 EXAM III (Unit III) 80 point				
Unit IV Gene and genetic regulation				
20,21,22	W 16 Sep	0900-1200	DNA replication, repair and recombination	Danaya/ Waraporn
23,24	F 18 Sep	0900-1100	Gene expression and control I	Kornkamon/ Mikhail
		1100-1200	Questions & Answers for Unit IV	Danaya
25,26	M 21 Sep	0900-1100	Gene expression and control II	Kornkamon/ Mikhail
		1100-1200	Special topic for Unit IV: Genes, genomes and biological function	Mikhail
		1300-1400	Questions & Answers for Unit IV	Kornkamon

Period	DATE	TIME	TOPIC	LECTURER
	W 23 Sep		Self-study	
	F 25 Sep	0900-1200	EXAM IV (Unit IV) 70 point	
	M 28 Sep		Self-study	

Course Coordinator: Dr. Jirundon Yuvaniyama E-mail: jirundon.yuv@mahidol.edu

Group Line: Course SCID506

