

Schedule for 2310380

BIOCHEMISTRY FOR BIOENGINEERINGS (3 credits)

First semester (2022)

Time: Mon 9.00-10.30, Wed 9.00-10.30

(*) 2 h 9.00- 11.00

Room: TBA

Co-ordinator: Kuakarun

Topic	Hrs.	Date	Instructor
1. Foundations of biochemistry	2	8, 10, 15, 17 Aug	Rath
2. Structure and catalysis			
2.1 Carbohydrates	2		Rath
2.2 Lipids	2		Rath
2.3 Nucleotides and nucleic acids	2	22, 24, 29, 31 Aug, 5(*) Sep	Kittikhun
2.4 Amino acids and proteins	2		Kittikhun
2.5 Enzymes	4		Kittikhun
3. Bioenergetics and Metabolism			
3.1 Overview of bioenergetics and metabolism	2	7, 12, 14, 19, 21, 26 Sep	Pattana
3.2 Carbohydrate metabolism	3		Pattana
3.3 Lipid metabolism	2		Pattana
3.4 Metabolism of N-containing compounds	2		Pattana
3.5 Integration of metabolism and metabolic regulation	2	28 Sep(*)	Kuakarun
Mid-term examination: สอบ 3 - 7 Oct 2022 [จัดสอบเอง]			
4. Information pathways		10, 12, 17, 19, 26(*) Oct	
4.1 DNA replication	2		Pawinee
4.2 Transcription	2		Pawinee
4.3 Translation	2		Pawinee
4.4 Gene regulation	2		Pawinee
5. DNA Technology		31 Oct, 2, 7, 9, 14(*) Nov	
5.1 Genetic engineering	4		Kuakarun
5.2 Metabolic engineering	4		Kuakarun
Final examination: สอบ 28 Nov - 13 Dec 2022 [จัดสอบเอง]			