

Schedule for 2310380			
BIOCHEMISTRY FOR BIOENGINEERINGS (3 credits)			
First semester (2024)			
Time: Mon 9.00-10.30, Wed 9.00-10.30		Co-ordinator: Kuakarun	
(*) 2 h 9.00- 11.00			
Room: TBA			
Topic	Hrs.	Date	Instructor
1. Foundations of biochemistry	2	5, 7, 14, 19 Aug	Rath
2. Structure and catalysis			
2.1 Carbohydrates	2		Rath
2.2 Lipids	2		Rath
2.3 Nucleotides and nucleic acids	2	21, 26, 28, Aug, 2, 4(*) Sep	Kittikhun (ตามเดิม)
2.4 Amino acids and proteins	2		Kittikhun (ตามเดิม)
2.5 Enzymes	4		Kittikhun (ตามเดิม)
3. Bioenergetics and Metabolism			
3.1 Overview of bioenergetics and metabolism	2	9, 11, 16, 18 Sep	Pattana
3.2 Carbohydrate metabolism	3		Pattana
3.3 Lipid metabolism	1		Pattana
Mid-term examination: สอบ 23 - 27 Sep 2024 [TBA]			
3.3 Lipid metabolism (continue)	1	30 Sep, 7 Oct	Pattana
3.4 Metabolism of N-containing compounds	2		Pattana
3.5 Integration of metabolism and metabolic regulation	2	9 Oct(*)	Kuakarun
4. Information pathways		16, 21, 28, 30 Oct, 4 Nov(*)	
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		6, 11, 13(*), 18(*), 20(*) Nov	
5.1 Genetic engineering	4		Kuakarun
5.2 Metabolic engineering	5		Kuakarun
Final-term examination: สอบ 25 Nov - 9 Dec 2024; [TBA]			