

Schedule for 2310380			
BIOCHEMISTRY FOR BIOENGINEERINGS (3 credits)			
First semester (2021)			
Time: Mon 9.00-10.30, Wed 9.00-10.30		Co-ordinator: Kuakarun	
(*) 2 h 9.00- 11.00			
MS Team: 2310380_Biochem Bioeng_2021.Group		Courseville: 2310380; Password:	
MT code: n3fiw8y		2310380	
Topic	Hrs.	Date	Instructor
1. Foundations of biochemistry	2	9, 11, 16, 18 Aug	Rath
2. Structure and catalysis			
2.1 Carbohydrates	2		Rath
2.2 Lipids	2		Rath
2.3 Nucleotides and nucleic acids	2	23, 25, 30 Aug, 1, 6(*) 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	8(*), 13, 15, 20(*), 22(*) Sep	Surasak
3.2 Carbohydrate metabolism	3		
3.3 Lipid metabolism	2		Surasak
3.4 Metabolism of N-containing compounds	2		Surasak
Mid-term examination: สอบ 27 Sep - 1 Oct 2021 [จัดสอบเอง]			
3.5 Integration of metabolism and metabolic regulation	2	4 Oct (*)	Kuakarun
4. Information pathways		6, 11, 18, 20, 25, 27 Oct	
4.1 DNA replication	2		Pawinee
4.2 Transcription	2		Pawinee
4.3 Translation	2		Pawinee
4.4 Gene regulation	3		Pawinee
5. DNA Technology		1, 3, 8, 10, 15(*) Nov	
5.1 Genetic engineering	4		Kuakarun
5.2 Metabolic engineering	4		Kuakarun
Final examination: สอบ 29 Nov - 14 Dec 2021 [จัดสอบเอง]			