

Schedule for 2310522			
CARBOHYDRATE BIOTECHNOLOGY (2 credits)			
First semester (2021)			
Time: TH, FR 13.00 - 14.00		Co-ordinator: Kittikhun	
Room: 519-SCH0			
Microsoft Teams: 2310522_Carbohydrate_Biotech_2564.Group			
MT code: l19ry0n			
Topic	Hrs.	Date	Instructor
1. Review on Carbohydrates 2. Introduction to Carbohydrate Biotechnology : From Agricultural Products to Carbohydrates of Industrial and Medicinal Importance	2	13, 19 Aug	Kittikhun
3. Enzymatic Production of Carbohydrates and Glycosides : Glycosyl Hydrolases and Glycosyl Transferases	2	20, 26 Aug	Kittikhun
4. Carbohydrate Characterization & Analysis	4	27 Aug, 2, 3, 9 Sep	Manchumas
5. Functional Carbohydrates : Structure, production, properties, and applications (Starch; Oligosac: MOS, IMO, Gento-OS, Cyclodextrins; Disac: Trehalose, Maltose, Maltitol, Nigerose; Monosac: Glucose, Fructose) 5.1 Starch and Related Saccharides 5.2 Fructose Related Saccharides (FOS,Glycosylsucrose, Palatinose, GOS, Lactosucrose)	5	10, 16, 17, 23 Sep (นัดเพิ่ม 1 ชั่วโมง)	Rath
Mid-term examination: สอบ 27 Sep - 1 Oct 2021 [30-Sep-2021, 13:00 - 15:00]			
5.3 Chitin-Chitosan and Other Low-digestible Saccharides (XOS, Manno-OS)	4	14, 15, 21, 28 Oct	Rath
6. Glycobiology and Glycoconjugates - Concepts of Glycobiology - Glycosylation and Disease - Glycoconjugates and recognition	6	29 Oct, 4, 5, 11, 12, 18 Nov	Kittikhun
7. Future Prospects: Carbohydrate Drug Design & Carbohydrate based Vaccines : Glycomics and Glycobiology : Functional Carbohydrates	3	19, 25, 26 Nov	Manchumas
Final examination: สอบ 29 Nov - 14 Dec 2021 [29-11-2021 13:00 - 15:00]			