

Time : July 20 - Aug 7 : MON - FRI 9.00 - 11.00 (2 h) or 9.00 - 11.30 (2.5 h) via Microsoft Team

Coordinator: Supaart

Topic	Hrs.	Date	Instructor
1. Biochemical Basis of the Cell <ul style="list-style-type: none"> • Introduction to biochemical concepts • Biochemical evolution • The chemical components of a cell: Building blocks of life 	3		Supaart
2. Macromolecules <ul style="list-style-type: none"> • Carbohydrate • Lipids • Nucleic acids • Protein and Enzymes (+Function) • Exploring proteins and proteomics 	6	July 16, 17, 20, 21	Supaart
Examination 1: July 30, 2020 (9.30-11.30)			
3. Basic Genetic Mechanisms <ul style="list-style-type: none"> • Genes and genomes • DNA replication, repair, and recombination • From DNA to protein • Exploring genes and genomics 	9	July 22, 23, 24, 27	Vorraon
Examination 2: July 31, 2020 (9.30-11.30)			
4. Energy and Metabolism <ul style="list-style-type: none"> • Basic concepts: bioenergetics and design of metabolism • Glycolysis and gluconeogenesis • The citric acid cycle • The mitochondrion: oxidative phosphorylation • Lipid metabolism • Metabolism of N-containing compounds 	10	Aug 3, 4, 5, 6, 7	Surasak
Examination 3: Aug 13, 2020 (13.30-15.30)			