

Schedule for 2310506				
BIOINFORMATICS I (3 credits)				
First semester (2023)				
Time: TH, FR 14.00 - 16.00			Co-ordinator: Teerapong	
Room: COM1, MVRH 509/2 MHVH				
Topic	Lect	Prac	Date	Instructor
1. Introduction to Bioinformatics	1	1	10-Aug	Teerapong
2. Databases				
2.1 Data banks of biological information	2	2	11, 17 Aug	Pattana
2.2 Retrieval of information and data mining	1	1	18-Aug	Pattana
2.3 Submitting sequences to the databases	1	1	24-Aug	Pattana
3. Sequence analysis I				
3.1 Sequence alignment	2	2	25, 31 Aug	Teerapong
3.2 Databases searching	1	1	1-Sep	Teerapong
3.3 Phylogenetic analysis	2	2	7, 8 Sep	Anchitta
4. Protein analysis				
4.1 Protein sequence analysis	2	2	14, 15 Sep	Veerasak
4.2 Molecular modeling	1	1	21 Sep	Thanyada
4.3 Prediction of protein tertiary structure by homology modeling	2	2	22 Sep, 12 Oct	Thanyada
<b>Mid-term examination: สอบ 25 - 29 Sep 2023; [วันที่ 29 ก.ย. 2566 เวลา 8:30-11:30 น.]</b>				
4.3 Computer simulation	3	3	19, 20, 26 Oct	Thanyada
4.4 Protein design	3	3	27 Oct, 2, 3 Nov	Thanyada
5. Gene and genome analysis				
5.1 Identification of gene structures/Genome sequencing and annotation	4	4	9, 10, 16, 17 Nov	Teerapong
5.2 Analysis of high throughput expression data	2	2	24, 25 Nov	Teerapong
<b>Final-term examination: สอบ 27 Nov- 12 Dec 2023; [วันที่ 29 พ.ย. 2566 เวลา 13:00-16:00 น.]</b>				