Schedule for 2310506				
BIOINFORMATICS I (3 credits)				
First semester (2024)				
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	8-Aug	Teerapong
2. Databases				
2.1 Data banks of biological information	2	2	9, 15 Aug	Pattana
2.2 Retrieval of information and data mining	1	1	16-Aug	Pattana
2.3 Submitting sequences to the databases	1	1	22-Aug	Pattana
3. Sequence analysis I				
3.1 Sequence alignment	2	2	23, 29 Aug	Teerapong
3.2 Databases searching	1	1	30-Aug	Teerapong
3.3 Phylogenetic analysis	2	2	5, 6 Sep	Supitcha
4. Protein analysis				
4.1 Protein sequence analysis	2	2	12, 13 Sep	Veerasak
4.2 Molecular modeling	2	2	19, 20 Sep	Thanyada
Mid-term examination: สอบ 23 - 27 Sep 2024; 27 ก.ย. 2567 เวลา 8:30-11:30 น.				
4. Protein analysis (continued)				
4.3 Prediction of protein tertiary structure by homology modeling	2	2	10, 11 Oct	Thanyada
4.4 Computer simulation	3	3	17, 18, 24 Oct	Thanyada
4.5 Protein design	3	3	25, 31 Oct, 1 Nov	Thanyada
5. Gene and genome analysis				
5.1 Identification of gene structures	2	2	7, 8 Nov	Teerapong
5.2 Genome sequencing and annotation	2	2	14, 15 Nov	Teerapong
5.2 Analysis of high throughput expression data	2	2	21, 22 Nov	Teerapong
Final-term examination: สอบ 25 Nov - 9 Dec 2024; 27 พ.ย. 2567 เวลา 13:00-16:00 น.				