

**Schedule for 2310506**

**BIOINFORMATICS I (3 credits)**

**First semester (2022)**

Time: TH, FR 14.00 - 16.00			<b>Co-ordinator:</b>	
Room: COM1, MVRH				
Topic	Lect	Prac	Date	Instructor
1. Introduction to Bioinformatics	1	1	11-Aug	Teerapong
2. Databases				
2.1 Data banks of biological information	2	2	18, 19 Aug	Pattana
2.2 Retrieval of information and data mining	1	1	25-Aug	Pattana
2.3 Submitting sequences to the databases	1	1	26-Aug	Pattana
3. Sequence analysis I				
3.1 Sequence alignment	2	2	1, 2 Sep	Teerapong
3.2 Databases searching	1	1	8-Sep	Teerapong
3.3 Phylogenetic analysis	1	1	9-Sep	Anchitta
4. Protein analysis				
4.1 Protein sequence analysis	2	2	15, 16 Sep	Veerasak
4.2 Molecular modeling	1	1	22, 23 Sep	Thanyada
4.3 Prediction of protein tertiary structure by homology modeling	2	2	29, 30 Sep	Thanyada
<b>Mid-term examination: สอบ 3-7 Oct 2022 [วันที่ 07-Oct-2022 เวลา 08:30 - 11:30 น.]</b>				
4.3 Computer simulation	3	3	20, 21, 27	Thanyada
4.4 Protein design	3	3	28 Oct, 3, 4	Thanyada
5. Gene and genome analysis				
5.1 Identification of gene structures/Genome sequencing and annotation	4	4	10, 11, 17, 18 Nov	Teerapong
5.2 Analysis of high throughput expression data	2	2	24, 25 Nov	Teerapong
<b>Final examination: สอบ 28 Nov - 14 Dec 2021 [วันที่ 30-Nov-2021 เวลา 13:00 - 16:00 น.]</b>				