Schedule for 2310451 (BBTech) (ปีสลับปี เว้น 2568)				
GENOMIC ANALYSIS FOR BIOTECHNOLOGY (3 credits)				
Second semester (2024)				
Time: MO 10.00-12.00 **Room**: MHVH 509/2			**Co-ordinator: Kunlaya**	
Time: FR 09.00 - 11.00 **Room**: SCI05 301				
Topic	**Lect**	**Prac**	**Date**	**Instructor**
1. Course Orientation			Jan 6	Kunlaya
2. Next-generation sequencing platforms - Genome sequencing - Processing of raw reads	4	4	Jan 6, 10, 13, 17	Pattana
3. Genome assembly and genome annotation - Prediction of promoter, Transcription-Factor-binding site, Translation Initiation Site, and the ORF	4	4	Jan 20, 24, 27, 31	Pattana
4. Microbiome - Metagenomics and metatranscriptomics	4	4	Feb 3, 7, 10, 14	Kunlaya
5. Detection of Sequence Polymorphism and the SNP Database	4	4	Feb 17, 21, 24, 28	Teerapong
Mid-term examination: 3 Mar 2025 8.30 am - 11.30 am				
6. Genome editing and applications	4	4	Mar 10, 14, 17, 21	Kunlaya
7. High-throughput expression Analysis - RNA Sequencing - Processing of raw reads	4	4	Mar 24, 28, 31 Apr 4	Teerapong
8. Applications of genome analysis (Invited Lecutre/Assignment) - **Guest Lecture 1** (9-11 am) - **Guest Lecture 2** (9-11 am)	 1 1	 1 1	 Apr 11 (9-11 am) Apr 18 (9-11 am)	Kunlaya
8. Applications of genome analysis (Discussion Pane/Group term projectl) - Understanding human genetic diseases/responses to drugs/bacterial pathogenicity - The impact of genomics on agriculture"	2	2 (SELF STUDY)	Apr 21	Kunlaya, Pattana, Teerapong
Final examination: 8 May 2025 8.30 am -11.30 am				