

Schedule for 2310555

GENE ENGINEER LAB (2 credits) **นิสิตไม่มีคนลงทะเบียนเรียนเลย**

Second semester (2020)

Time: MO 09.00 - 16.00

LAB room 605;

Co-ordinator: Tanakarn

Topic	Hrs	Date	1st Instructor	2nd Instructor
I.				
1.1 Orientation	1	14-Aug-20	Tanakarn	
1.2 Brief chromosomal and plasmid DNA extractions	2		Tanakarn	
1.3 Reagent preparation for plasmid extraction	3		Tanakarn	
1.4 Brief PCR and cloning	1	21-Aug-20	Tanakarn	
1.5 PCR	3		Tanakarn	
1.6 Chromosomal and plasmid extraction	2		Tanakarn	
1.7 Agarose gel electrophoresis of PCR product and plasmid	3	28-Aug-20	Tanakarn	
1.8 Discussion	3		Tanakarn	
II			Pawinee	
2.1 Brief restriction enzyme digestion and ligation	1	4-Sep-20	Pawinee	
2.2 Restriction enzyme digestion	2		Pawinee	
2.3 Ligation	3		Pawinee	
2.4 Brief transformation	3	11-Sep-20	Pawinee	
2.5 Reagent preparation and transformation	3		Pawinee	
2.6 Brief clone identification	2	18-Sep-20	Pawinee	
2.7 Plasmid extraction	1		Pawinee	
2.8 Restriction analysis and colony PCR	3		Pawinee	
2.9 Discussion	3	25-Sep-20	Pawinee	
<b>Mid-term examination:</b>				
III.				
3.1 Brief site-directed mutagenesis	1	16-Oct-20	Kittikhun	
3.2 Site-directed mutagenesis and error-prone PCR	5		Kittikhun	
3.3 Transformation of site-directed mutagenesis	1	30-Oct-20	Kittikhun	
3.4 Gel electrophoresis, gel extraction, ligation, and transformation of error-prone PCR reaction	5		Kittikhun	
3.5 Analysis of mutagenesis results	6		Kittikhun	
3.6 Discussion	3	6-Nov-19 (am)	Kittikhun	
IV.				
4.1 Brief RNA extraction	1		Tanakarn	

4.2 Preparation of chemicals & glassware, induction of expression and cell collection	2	6-Nov-19 (pm)	Tanakarn
4.3 RNA extraction, SDS-PAGE of whole cells	3		Tanakarn
4.4 Quantitative and quanlitative determination- agarose gel electrophoresis, Brief gene expression analysis	3	13-Nov-20	Tanakarn
4.5 DNase treatment of total RNA	3		Supaart
4.6 Reverse transcription	3	20-Nov-20	Supaart
4.7 PCR	2		Supaart
4.8 Agarose gel electrophoresis	3	27-Nov-20	Supaart
4.9 Discussion	3	นัดเพิ่ม	Supaart
Final examination:			