

**Hong Kong ABE lab sequence 2017-2018**

Lab Modules (Estimated Experiment Time)		1	2	3
Chapter 1 Learning Basic Laboratory Skills				
30 mins	Lab 1.1: Basic pipetting and serial dilution	✓	✓	✓
40 mins	Lab 1.2: Dye separation by gel electrophoresis			
Chapter 2 Identifying a Recombinant Plasmid (plasmid A-rfp)				
30 mins	Lab 2.1: Checking plasmid with PCR (plasmid A-rfp provided) <i>*110 mins PCR Run after class</i>		✓	
70 mins#	Lab 2.2: Confirmation by Gel Electrophoresis (PCR products)			
Chapter 3 Constructing Recombinant Plasmid (pARA-R)				
30 mins	Lab 3.1: Cutting the two plasmids (Restriction Digestion) (Plasmid K and A) <i>*60 mins Digestion Incubation after class</i>	✓		✓
20 mins	Lab 3.2: Putting the rfp gene into the plasmid (Ligation) (Plasmid A-rfp) <i>*Ligation Incubation Overnight</i>			
70 mins#	Lab 3.3: Confirmation by Gel Electrophoresis (Digestion and Ligation products)			
Chapter 4 Creating Genetic Modified Bacteria				
75 mins	Lab 4: Transforming bacteria with recombinant plasmid (Ligation products/ A-rfp) <i>*Plates Incubation Overnight and View results next lesson</i>		✓	✓

For Gel Electrophoresis Lab (2.2/3.3) Experiment time =

70 mins: finish gel run and view results in class

OR

40 mins: con't gel run after class and view results next lesson