

Week 1	DAY 1 Monday	DAY 2 Tuesday		DAY 3 Wednesday	DAY 4 Thursday		DAY 5 Friday						
Dates	2026-03-02	2026-03-03		2026-03-04	2026-03-05		2026-03-06						
Time	Tasks												
09:00	Course Introduction / Group distribution	Lecture Molecular Cloning		Pick Colonies		Lecture Protein Splicing and Cell Line Engineering	ITiM / Start Selection and passage to 10 cm						
09:30													
10:00				Transfection									
10:30	Safety Briefing	Purification of digested PCR Products for Ligation Cloning	Exercise Molecular Cloning with Benchling (1) - Assignments			Miniprep	Medium Exchange and Illumination Start	SEAP Supernatant Collection and Inactivation at 65°C					
11:00	PCR / Gel preparation												
11:30													
12:00				Lecture Reporters		Test-digest		Break					
12:30	Break			AQUA / Ligation	Break		Break		Sequencing Analysis				
13:00	Gel-Electrophoresis												
13:30	PCR Product Gel Purification / DNA Quantification	Break			Seeding Mammalian Cells	Change Medium after Transfection	Gel-Electrophoresis and DNA Sequencing	SEAP Assay and Analysis					
14:00													
14:30		Transformation		Gel-Electrophoresis and DNA Sequencing									
15:00	Digestion of PCR Product for Ligation Cloning												
15:30													
16:00	End of the day cleaning	End of the day cleaning		End of the day cleaning		End of the day cleaning							
16:30													
17:00													
17:30	End of the day cleaning												
18:00													

Week 2	DAY 6 Monday	DAY 7 Tuesday	DAY 8 Wednesday	DAY 9 Thursday	DAY 10 Friday
Dates	2026-03-09	2026-03-10	2026-03-11	2026-03-12	2026-03-13
Time	Tasks				
09:00	Transformation into E. coli Expression Strain	E. coli Inoculation, OD Measurment	Fluoreseence and OD Measurement, Analysis	Exercise SynBio Startup Pitch	ITiM / split cells
09:30					
10:00					
10:30	Change Medium for selection and passage on 10 cm dish		Inoculate cultures	Midiprep	
11:00					
11:30					
12:00	Break	Break	Break		
12:30				Induction with IPTG, Arabinose	
13:00	Lecture Optogenetics and Gene Switches	Break	Exercise PyMOL Modeling	Harvest cultures	Break
13:30		Transformation for Midiprep			
14:00		Lecture Synthetic Biology		Exercise PyMOL Modeling	Midiprep
14:30					
15:00					
15:30					
16:00	Protocol / Presentation Prep Time	Transformation for Midiprep	Change Medium for selection	Protocol / Presentation Prep Time	
16:30					
17:00	End of the day cleaning	End of the day cleaning	End of the day cleaning	End of the day cleaning	
17:30			End of the day cleaning		
18:00					