

Laboratory techniques in medical biochemistry (SIBB 511)**Credit 1 (0-2-1)****Tuesday- Friday 1.00 – 4.00 pm****9,10th Fl. Srisavarindira building****Course coordinator: Primana Punnakitikashem****Phone 02-419-9133, E-mail: primana.pun@mahidol.ac.th**

Week	Date	Topic	Lecturer	Teaching staff
1	7 August 2025	Introduction to basic biochemistry techniques	Primana	Jarichad, Sirinapa, Punyawee
	8 August 2025			
2	21 August 2025	Spectrophotometry	Kongtana	Saiphon, Punyawee
	22 August 2025	Spectrofluorometry	Chanatip	Punyawee, Sarawut
3	28 August 2025	Gel-filtration chromatography	Chanatip	Sirinapa, Nutnicha
4	2 September 2025	High-performance liquid chromatography	Chayanon	Wannisa, Anchaleekorn
5	9 September 2025	Mass spectrometry	Sakda	Narumol, Suphitcha
	11 September 2025	MS-based metabolomics Data analysis		
6	18 September 2025	Tissue culture technique	Kongtana	Saiphon, Nutnicha
	19 September 2025			
7	25 September 2025	Protein isolation and purification methods	Chayanon	Anchaleekorn, Supanee, Jarichad
	26 September 2025			
8	30 September 2025	Enzyme kinetics	Wichit	Supanee, Chutipong

Laboratory techniques in molecular biology (SIBB 510)**Credit 2 (0-4-2)****Tuesday- Friday 1.00 – 4.00 pm****9,10th Fl. Srisavarindira building****Course coordinator: Primana Punnakitikashem****Phone 02-419-9133, E-mail: primana.pun@mahidol.ac.th**

Week	Date	Topic	Lecturer	Teaching staff
1	14 October 2025	Molecular cytogenetics	Vorapan	Witchuda
2	21 October 2025	Sequencing technique	Varodom	Dr.Theeraphong, Numpueng, Patcharee, Nattha
3	28 October 2025	SDS-PAGE, Western blotting	Chalermchai & Wonnop	Jarichad, Nutnicha,Chutipong
	29 October 2025			
	30 October 2025	DNA extraction,quantification and electrophoretic analysis		Jarichad, Saiphon, Supanee
	31 October 2025			
4	4 November 2025	DNA recombination and cloning	Chalermchai & Wonnop	Anchaleekorn, Supanee, Patcha
	5 November 2025			
	6 November 2025			
	7 November 2025			
5	13 November 2025	Enzyme-linked immunosorbent assay	Chayanon	Anchaleekorn, Suneerat, Chutipong
	14 November 2025			
6	18 November 2025	conventional PCR and quantitative PCR	Chatchawan	Chayapol, Sirinapa, Patcha
	19 November 2025			
	20 November 2025			
7	25 November 2025	Bioinformatics	Bhoom	
	26 November 2025			

8	27 November 2025		Chayanon	
	28 November 2025			
	2 December 2025	Flow cytometry	Primana	Suneerat, Chayapol