

Schedule for 2310526 Foren Biochem

Forensic Biochemistry (2 credits)

First semester (2023)

	Time: Mon 9.00-11.00		Co-ordinator: Kunlaya	
	Room: 521 SCI10 503			
Week	Topic	Lect hr	Date	Instructor
1	1. Introduction to Forensic Biochemistry	2	7-ส.ค.-23	Hathaichanok
2	2. Biological Evidence Collection and handling of material at the crime scene	2	21-ส.ค.-23	Surachan
3	Forensic analysis of biological evidences (Forensic serology, Blood detection, Semen identification)	2	28-ส.ค.-23	Hathaichanok
4	3. Genome and Molecular Markers used in Forensic Mitochondrial DNA (mtDNA) Short Tandem repeats (STRs) Single nucleotide polymorphisms (SN)Ps DNA mehtylation	2	4-ก.ย.-23	Kunlaya
5	4. Forensic DNA analysis	4	11-Sep-23, นัดเพิ่ม 2h	Kunlaya
	DNA sample preparation for forensic analysis			
	DNA Technologies used in Forensic Sciences			
	- PCR and Realtime PCR			
6	- Capillary Electrophoresis			
	- Next-Generation Sequencing			
7	Short Tandem Repeat (STR) analysis Paternity Determination Y-chromosome analysis (X-STR, T-STR, mtDNA, analysis) SNPs for Human Identification	2	18-ก.ย.-23	Hathaichanok
8	Mid-term examination: สอบ 25 - 29 Sep 2023 (29 Sep 2023, 1-3 pm)			
9	Age assessment (DNA methylation, Telomere lenght, small RNA biomarker)	3 (1-4 pm)	2-Oct-23, 9-Oct-23 (1h)	Kunlaya
10	6. Biochemical Techniques in toxic substance analysis	5	9-Oct-23 (1h)	Karan
11	Enhanced chromatographic separation methods (GC, HPLC, Supercritical Liquid Chromatography (SFC), Mass spectrometry)		16-Oct-23, 30-Oct-23	
12	Detection of toxic substances in forensic samples	2	6-พ.ย.-23	Phuttaraporn
14	7. Ethical, and Regulatory Concerns in Forensic	2	13-พ.ย.-23	Supakorn
15	Visit : Institute of Forensic Medicine, Police hospital	3 (1-4 pm)	20-พ.ย.-23	Kunlaya
16	Final-term examination: สอบ 27 Nov- 12 Dec 2023 (28 Nov 2023, 1-3 pm)			

Evaluation:	
Paper Exam	70%
Final Exam	70%
Workshop + Assignment	25%
Attendance	5%

