



SIID501: MOLECULAR AND CELLULAR BASIS OF BIOMEDICINE

The topics encompass

1. Biomolecules: its structure & function
2. Regulation of gene expression
3. Energy metabolism
4. Cell proliferation & cancer
5. Host-pathogen interaction & host immune response and basic molecular techniques in biomedical research.



SELECx

Contact Informations

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COURSE DURATION

18JUN24

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30JUL24



DRAFT SIID501 Molecular and Cellular Basis of Biomedicine

Academic Year 2024

DATE	TIME	FORMAT	TOPIC	FACULTY STAFF	ATTEN DANCE (2%)	SMALL GROUP (38%)	EXAM (60%)
18 Jun 24	9.00 – 10.00	Live (Zoom)	COURSE INTRODUCTION	Thawornchai Limjindaporn	✓		
19 Jun 24	10.00 – 11.00	Video (SelecX)	(L2) CELL STRUCTURE AND FUNCTION: PROKARYOTE	Iyarit Thaipisuitikul	✓		
	13.00 – 15.00	Video (SelecX)	(L1) BIOMOLECULES	Napatara Tirawanchai	✓		
20 Jun 24	10.00 – 12.00	Video (SelecX)	(L3) CELL STRUCTURE AND FUNCTION: EUKARYOTE	Thawornchai Limjindaporn	✓		
21 Jun 24	13.00 - 16.00	Live (Zoom)	(SMGR 1) SEPARATION OF BIOMOLECULES & CELL STRUCTURAL AND FUNCTIONAL STUDIES	<u>Thawornchai Limjindaporn</u> , Chairat Turbpaiboon, Adisorn Ratanayotha	✓	✓	
24 Jun 24	9.00 – 11.00	Video + Live	(L4) DNA	Chalermchai Mitrpant	✓		
	13.00 – 16.00	Live (Zoom)	(L5) GENOME	Chayanon Peerapiitayamongkol	✓		
25 Jun 24	13.00 – 16.00	Live (Zoom)	(SMGR 2) GENE TECHNOLOGY	<u>Wichit Suthammarak</u> , Chairat Turbpaiboon, Chanatip Metheetrairut	✓	✓	
26 Jun 24	9.00 – 12.00	Video (SelecX)	(L6) RNA	Chanatip Methetrairut	✓		
27 Jun 24	13.00 – 16.00	Live (Zoom)	(SMGR 3) REGULATION OF GENE EXPRESSION	<u>Chanatip Methetrairut</u> , Chairat Turbpaiboon, Kongtana Trakarnsanga, Chayanon Peerapiitayamongkol	✓	✓	
28 Jun 24	9.00 – 12.00	Live (Zoom)	(L7) PROTEIN	Chalermchai Mitrpant	✓		
1 Jul 24	9.00 – 12.00	Live (Zoom)	(SMGR 4) PROTEIN STUDIES	<u>Chayanon Peerapiitayamongkol</u> , Chanatip Methetrairut, Kongtana Trakarnsanga, Chairat Turbpaiboon,	✓	✓	
	13.00 – 15.00	Live (Zoom)	(L8) ENERGY METABOLISM	Wichit Suthammarak	✓		
2 Jul 24	10.00 – 12.00	Live (Zoom)	(L9) ENZYME STRUCTURE AND FUNCTION	Wichit Suthammarak	✓		
	13.00 – 16.00	Live (Zoom)	(SMGR 5) COMMON ENZYME DEFICIENCY IN HUMAN	<u>Wichit Suthammarak</u> , Chairat Turbpaiboon , Chanatip Metheetrairut	✓	✓	

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3 Jul 24	9.00 – 12.00	EXAM (SelecX & Zoom)	FORMATIVE EXAM 1: (REV 1) REVISION AND FORMATIVE EVALUATION 1 (1.20) **Test time : 09.00 - 10.20 **Revision time: 10.25 - 12.00	Napatara Tirawanchai, Iyarit Thaipisuitikul, Thawornchai Limjindaporn, Chalermchai Mitrpant, Chayanon Peerapiitayamongkol, Wichit Suthammarak, Chantip Metheetrairut	✓		
10 Jul 24	9.00 – 11.20	EXAM (SelecX & Zoom)	SUMMATIVE EXAM 1: L1-9; SMGR 1-5	Faculty	✓		✓
11 Jul 24	9.00 – 11.00	Video (SelecX)	(L10) MEMBRANE TRANSPORT	<i>Rujapope Sutwisesak</i>	✓		
	13.00 – 15.00	Video (SelecX)	(L11) CELL COMMUNICATION AND CELL SIGNALINGS	<i>Thaksaon Kittipassorn</i>	✓		
12 Jul 24	13.00 – 16.00	Live (Zoom)	(SMGR 6) MEMBRANE TRANSPORT ANALYSIS AND RECEPTOR – DRUG INTERACTION	<i>Rujapope Sutwisesak, Thaksaon Kittipassorn, Patamat Nitiwarangoon</i>	✓	✓	
15 Jul 24	9.00 – 12.00	Live (Zoom)	(L12) CELL PROLIFERATION AND CELL DIFFERENTIATION	Siwanon Jirawatanotai	✓		
	13.00 -15.00	Live (Zoom)	(L13) CELL DEATH	Somponnat Sampattavanich	✓		
16 Jul 24	9.00 – 11.00	Live (Zoom)	(L14) CANCER	Siwanon Jirawatanotai	✓		
17 Jul 24	13.00 – 16.00	Live (Zoom)	(SMGR 7) UNDERSTANDING HETEROGENEITY OF CELL FATE DECISIONS	<u><i>Somponnat Sampattavanich,</i></u> Siwanon Jirawatnotai, Methichit Wattanapanitch, Adisak Wongkajornsilp, Suwattanee Kooptiwut	✓	✓	
18 Jul 24	9.00 – 12.00	Live (Zoom)	(SMGR 8) CANCER RESEARCH	<u><i>Siwanon Jirawatanotai,</i></u> Somponnat Sampattavanich, Adisak Wongkajornsilp, Weerawon Thangboonjit	✓	✓	
19 Jul 24	9.00 – 10.00	Video (SelecX)	(L15) BASIC IMMUNE RESPONSE	Phornnop Naiyanetr	✓		

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	10.00 – 11.00	Video (SelecX)	(L16) HOST – PATHOGEN INTERACTION	Iyarit Thaipisuitikul	✓		
	11.00 – 12.00	Video (SelecX)	(L17) ANTIGEN – ANTIBODY INTERACTION	Patimaporn Wongprompitak	✓		
23 Jul 24	9.00 – 12.00	Live (Zoom)	(SMGR 9) BASIC IMMUNOLOGICAL METHODS AND HOST – PATHOGEN INTERACTION	<u>Duangjit Kanistanon, Iyarit Thaipisuitikul</u> , Patimaporn Wongprompitak, Phornnop Naiyanetr, Wiwit Tantibhedhyangkul, Yuttana Sinoulprasert	✓	✓	
	13.00 – 16.00	Online	FORMATIVE EXAM 2: (REV 2) REVISION AND FORMATIVE EVALUATION 2 (1.20) **Test time : 13.00 - 14.20 **Revision time: 14.25 - 16.00	<i>Rujapope Sutwises, Thaksaon Kittipassorn, Siwanon Jirawatanotai, Somponnat Sampattavanich, Iyarit Thaipisuitikul, Patimaporn Wongprompitak, Phornnop Naiyanetr, Duangjit Kanistanon</i>	✓		
30 Jul 24	8.30 – 10.40	EXAM (SelecX & Zoom)	SUMMATIVE EXAM 2: L10-17; SMGR 6-9	Faculty	✓		✓