

SCPM 511: Molecular and Cellular Science in Pharmacology

Date: August 9th – September 13th, 2021

Time: 09:00-12:00 Mon-Wed-Fri

Venue: online via google classroom code 'xs7khao'

Course coordinator: Asst. Prof. Porntipa Korprasertthaworn (porntipa.kor@mahidol.ac.th)

Date	Topics	Instructors
Mon 9 Aug 2021	Orientation (8:30-9:00)	Porntipa
	L1: Cell organelles L2: Carbohydrate and lipid L3: Protein	Noppawan Noppawan Bodee
Wed 11 Aug 2021 (10:00-12:00)	L4: Biomolecules as drug target L5: Cell to cell communication	Noppawan
Fri 13 Aug 2021	L6: Energy metabolism L7: Oxidative phosphorylation L8: Metabolic pathway as drug target	Porntipa
Mon 16 Aug 2021 (10:00-12:00)	L9-10: Receptors and ion channels	Darawan
Wed 18 Aug 2021	L11-12: Signal transduction and secondary messengers L13: Signaling pathway as drug target	Darawan
Fri 20 Aug 2021 (10:00-12:00)	L14-15: Neurotransmitters and neuromodulators	Nattinee
Mon 23 Aug 2021	Examination I (L 1-10)	
Wed 25 Aug 2021	L16: Autacoids I – histamines (antihistamines), serotonin L17: Autacoids II – prostaglandins, leukotrienes L18: Nitric oxide and bradykinin	Pansakorn
Fri 27 Aug 2021	L19: Overview of immune system L20: Antigen recognition & body response to invaders L21: Cytokines and chemokines	Yaowarin
Mon 30 Aug 2021	Examination II (L 11-21)	
Wed 1 Sep 2021	L22: From DNA to gene expression L23: Gene regulation L24: Gene regulatory pathway as drug target	Porntipa
Fri 3 Sep 2021	L25-26: Cell cycle and cell death L27: Cell responses to injury	Ruedee
Mon 6 Sep 2021 (10:00-12:00)	L28-29: Carcinogenesis	Pimtip
Wed 8 Sep 2021 (10:00-12:00)	Conference: Cytotoxic agents (2 h)	Pimtip
Fri 10 Sep 2021	Self-study	
Mon 13 Sep 2021	Examination III (L 22-29)	

Evaluation methods

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| 1. Examination (L1-29) | 85% |
| 2. Conference rubric | 5% |
| 3. Performance and participation in class (rubric) | 10% |