

SCBE 213 Fundamental Biochemistry

Course time: **Monday** 9.30 am – 12.30 pm/SC1-161 (Salaya)

Jan	5	(1) Introduction and water	Pagkapol
	12	(2) Carbohydrates	Pagkapol
	19	(3) Amino acid, peptides, and proteins	Puey
	28 (Wed) Phayathai 13.30-16.30	(4) Protein three-dimensional structure MUSC Library Computer Lab	Puey
Feb	2	(5) Basic concepts of enzymes	Pagkapol
	9	(6) Lipids	Pagkapol
	16	(7) Metabolism of carbohydrates	Thaned
	23	(8) Citric acid cycle and oxidative phosphorylation	Thaned
Mar	Midterm Exam Mar 2 - 6		
	9	(9) Metabolism of lipids	Thaned
	16	(10) Metabolism of amino acids	Puey
	18 (Wed)	(11) Metabolism of nucleotides N-516 Phayathai 13.30-16.30	Pagkapol
	23	(12) Photosynthesis	Dowrung
	30	(13) Metabolic Integration	Pagkapol
Apr	6	Holiday	
	13	Holiday	
	20	(14) Cellular responses to pollutants	Puey
	22 (Wed)	(15) Metabolic engineering N-516 Phayathai 13.30-16.30	Narupat
May	Final Exam Apr 27 – May 8		

Course Coordinators

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Grading

Assignment/attendance (2% per lecture 1-15)	30%
Midterm (Lectures 1-8)	35%
Final (Lectures 9-15)	35%

Lecturers

Dr. Pagkapol Pongsawakul	pagkapol.pon@mahidol.edu
Asst. Prof. Dr. Puey Ounjai	puey.oun@mahidol.edu
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Asst. Prof. Dr. Narupat Hongdilokkul	narupat.hon@mahidol.edu

Texts

- 1) Ferrier, R.,D., *Lippincott's Illustrated Reviews Biochemistry*, 6th edition, Lippincott Williams & Wilkins (ASP)
- 2) Lehninger, L. A., Nelson, D. L., and Cox, M. M., *Principles of Biochemistry*, 4th or 5th edition, Worth, New York