Syllabus of Fall Semester, 2018

Course Title	BIOCHEMISTRY(II)	Course Code	MB22646	Section	039
Department	Molecular Biology	Level	2	Credit - Theory - Practice	3.0 - 3.0 - 0.0
Class Hours & Classroom	Tue. 10:30(75) 411-402,Thu. 10:30(75) 411-402				
Lecturer	Min, Do Sik	Office		Office Hours	
		Telephone		E-mail	
Methodology of Instruction					
Evaluation and Grading	Mid Exam: 45%, Final Exam: 45%, Report , Attendance and Attitude: 10% * Students with disabilities can request an extension of the exam hour, and they can take exams by getting writing assistance or by using a computer.				
Prerequisites					
Course Objectives	To understand enerygy production and its regulation through metabolic pathway of organic molecules such as carbohydrate, fatty acid, protein. To provide students with an integrated method leading to the understanding performace of physiological function through communication between organic molecules and pathological abnormalities by metabolic disturbance.				
Course Description	To understand the concepts for metabolism and integrated function of living organism * Students with disabilities can negotiate with the Disabled Student's Academic Support Center regarding course materials and assignments.				

Relationship between Courses and Core Competencies

8 Core Competencies of PNU	Global- Cultural Competency	Communication Competency	Convergence Competency	Application Competency	Community Service Competency	Human Character Competency	Foundation Knowledge Competency	High-order Thinking Competency
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Core Competencies Based on Courses and Educational Methods

Core Competencies of Department		Educational Methods
3	Develop molecular biological basic knowledge	

Textbooks and References

Required Textbooks	Lehninger, Principle of Biochemistry (fifth edition)
References	Biochemistry (third edition), Garrett and Grisham

Weekly Schedule of Classes		
Week No.	Course Material	Assignments and Other Notes
Week 1	[Orientation and Education on Academic Misbehavior(e.g. Cheating, Plagiarism) and Safety Education on Experiment and Practice] Introduction	
Week 2	Principle of Biogenetics	
Week 3	Principle of Biogenetics	
Week 4	Glycolysis, Gluconeogenesis, PPP	
Week 5	Glycolysis, Gluconeogenesis, PPP	
Week 6	Pronciple of metabolic regulation: Glucose and Glycogen	
Week 7	Pronciple of metabolic regulation: Glucose and Glycogen	
Week 8	Mid-term Exam.	
Week 9	Citric acid cycle	
Week10	Citric acid cycle	
Week11	Fatty acid metabolism	
Week12	Amino acid metabolism and production of urea	
Week13	Oxidative phosphorylation	
Week14	Carbohydrate synthesis	
Week15	Biosynthesis of amino acidm Nucelotide, and related	
Week16	Final Exam.	
Attachment		