Schedule for 2310303

HUMAN BIOCHEMISTRY (2 credits)

First semester (2019)

Time: TUE 10.00 - 12.00

Room: 207 MHMK Co-ordinator: Nuchanat

Topic	Hrs.	Date	Instructor
Nutrient classification and their roles in human body Biochemistry and functions of energy molecules: carbohydrates, lipids and proteins Biochemistry and functions of enzymes	4	13, 20 Aug 2019	Tanakarn
Determination and value of food energy Recommended energy requirement in a day Nutrition label Vitamins, minerals and water Classification and function of vitamins Classification, source and function of minerals Electrolytes Role of minerals and electrolytes for exercise Chemistry of water and function of water in body Water equilibrium Water requirement for exercise Acid/base equilibrium in human body	4	27 Aug, 3 Sep 2019	Kittikhun
Bioenergentics and thermodynamics Biological oxidation-reduction reactions Oxidative phosphorylation	2	10-Sep-19	Nuchanat
Anaerobic and Aerobic respiration Acatabolic and Anabolic process of carbohydrate	4	17, 24 Sep 2019	Nuchanat
Exercise energy systems The transfer of energy from nutrients during exercise Carbohydrate consumption during and after exercise	2	1 Oct 2019	Nuchanat
Mid-term examination			

Energy from lipids Lipids in food Digestion and absortion of lipids in human body Lipoprotein Llipid Metabolism Lipids as fuels for exercise	4	15, 22 Oct 2018	Surasak
Nitrogen balance Nitrogen balance value during exercise Energy release from proteins Digestion and absorption of proteins in human body	2	29 Oct 2019	Surasak
Amino acid metabolism Proteins as fuels for exercise Affinity of metabolism Important interconversions between biomolecules Regulation of metabolism and adaptation of body during short and long term exercise	2	5 Nov 2019	Surasak
Physiological function and exercise performance Hormones and their functions Biochemical mechanism of hormones Effect of exercise on hormone secretion Ergogenic aids in current application Gene doping and stem cells for exercise performance	4	12,19 Nov 2019	Saowarath
Final examination			