

The University of Jordan

Faculty: Medicine

Semester: First

Course Name: Metabolism

Other instructors: Prof. Nafez Abu Tarboush

Department: Physiology and Biochemistry

Coordinator: Dr. Diala Abu-Hassan

Course Number: 0501223

Course Description

This three-credit hour course is mandatory for second-year medical students. The course is preceded by introduction to biochemistry where basic concepts of structures and functions of macromolecules have been given. In this course, a detailed description of the various metabolic processes will be given. This includes metabolism of energy, the metabolism of carbohydrates, lipids, proteins, and nucleic acids, followed by metabolism integration and obesity.

Metabolism Course Contents

Topic	No. of lectures	Instructor
Bioenergetics of the cell	3	Prof. Nafez
Energy Metabolism (TCA cycle)	3	Prof. Nafez
Energy Metabolism (Oxidative Phosphorylation)	3	Prof. Nafez
Carbohydrate metabolism & ROS	10	Dr. Diala
Lipid metabolism	10	Dr. Diala
Amino acids & protein metabolism	3	Prof. Nafez
Conversion of amino acids to specialized products	2	Prof. Nafez
Nucleic acid metabolism	2	Dr. Diala
Integration of metabolism	1	Dr. Diala
Obesity and diabetes mellitus	1	Prof. Nafez

Evaluation

Evaluation	Point %	Date
Midterm Exam	40%	TBD by the Office of Examinations
Final Exam	60%	TBD by the Office of Examinations

Main Reference/s:

Lippincott's illustrated reviews, Biochemistry, 6th edition

Marks' Basic Medical Biochemistry: A Clinical Approach, 3rd Edition