



Jordan University of Science and Technology
Faculty of Agriculture
Nutrition & Food Technology Department

NF284 Human Nutrition - JNQF Level: 7

Second Semester 2023-2024

Course Catalog

3 Credit Hours. Principles of human nutrition applicable to all ages of human development. Impact of environment, economics, and culture on food and nutrition

Teaching Method: On Campus

Text Book

Title	Advanced Nutrition and Human Metabolism
Author(s)	Gropper, S. and Groff, J.
Edition	6th Edition
Short Name	Advanced human nutrition
Other Information	

Instructor

Name	Dr. Sana Janakat
Office Location	C4L3
Office Hours	Sun : 09:30 - 10:30 Mon : 09:30 - 11:30 Tue : 11:30 - 13:30 Thu : 09:30 - 10:30 Thu : 11:30 - 12:30
Email	jana@just.edu.jo

Class Schedule & Room

Section 1:

Lecture Time: Sun, Tue, Thu : 08:30 - 09:30

Room: قاعة الغزالي

Prerequisites

Line Number	Course Name	Prerequisite Type
912620	CHEM262 Biochemistry	Prerequisite / Pass
821033	HSS103BT General Biology	Prerequisite / Pass
961030	BT103 General Biology	Prerequisite / Pass
632810	NF281 Principles Of Nutrition	Prerequisite / Pass

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Components of a typical cell Cellular proteins	
Week 2	Apoptosis Cytoskeleton	
Week 3	Structure of the digestive tract Digestive and absorptive processes Coordination and regulation of digestive process	
Week 4	Overview of structural features of carbohydrates Simple carbohydrates Complex carbohydrates Digestion	
Week 5	Absorption, transport and distribution of carbohydrates Glycemic response to carbohydrates	
Week 6	Definition, Chemistry and characteristics of dietary and functional fibers Selected properties, physiological and metabolic effects of fibers Role of fibers in disease prevention	
Week 7	Structure and biological importance of lipids Digestion, absorption and transport of lipids	
Week 8	Lipids, lipoproteins and cardiovascular disease Integrated metabolism in tissues Brown fat thermogenesis	
Week 9	Amino acids classification according to R groups Amino acids classification according to their fate Amino acids essentiality Digestion and absorption of proteins	
Week 10	History of vitamins Vitamin C, B1,B2,Niacine, and Pantothenic acid	
Week 11	Biotin, Folate, B12 and B6	
Week 12	Vitamin A and carotenoids Vitamin D Vitamin E Vitamin K	

Week 13	Calcium, phosphorus and magnesium	
Weeks 14, 15	Iron, zinc, copper, chromium, iodine, manganese and molybdenum	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
To provide detailed information on the function, digestion, transport, storage, and metabolism of the nutrients. [1SLO1] [1L7K1, 1L7S1]	25%	
To delineate key metabolic pathways in the utilization of macronutrients as well as the interrelationships among nutrients in metabolism [1SLO1] [1L7K1]	25%	
Identify micronutrients that function in energy metabolism, biosynthetic reactions, structural components, regulatory processes, free radical/antioxidant protection, and disease prevention [1SLO1] [1L7K1, 1L7S1]	25%	
Identify changes in metabolism and nutrient needs during exercise [1SLO1] [1L7K1]	10%	
To interpret the basis of human nutrient deficiencies and excesses [1SLO1] [1L7K1, 1L7S2]	15%	

Relationship to Program Student Outcomes (Out of 100%)				
SLO1	SLO2	SLO3	SLO4	SLO5
100				

Relationship to NQF Outcomes (Out of 100%)		
L7K1	L7S1	L7S2
67.5	25	7.5

Policy	
Exams	All exams are closed book and notes. The final exam is comprehensive (covers all the material). Incomplete exams need approval from the dean.
Cheating	Cheating will not be tolerated, and in case of cheating the student will be subject to punishment according to the rules of the university.
Attendance	According to the policy of JUST, if you exceed 20% of the number of classes you will fail the class, regardless of the reason.
Participation	I will add 4-5 marks for your assignments and quizzes, which are going to be added as a bonus.

