



Course Specification

(Bachelor)

Course Title: Foundation of Human Nutrition

Course Code: APFQ1103

Program: Clinical Nutrition

Department: Clinical Nutrition

College: Applied Medical Sciences

Institution: Umm Al-Qura University

Version: 3

Last Revision Date: 3 October 2024

Table of Contents

A. General information about the course:.....	3
B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods.....	4
C. Course Content	5
D. Students Assessment Activities	5
E. Learning Resources and Facilities.....	6
F. Assessment of Course Quality	6
G. Specification Approval	7





A. General information about the course:

1. Course Identification

1. Credit hours: (3)

2. Course type

- A. ☐ University ☐ College ☒ Department ☐ Track ☐ Others
- B. ☒ Required ☐ Elective

3. Level/year at which this course is offered: (1st Level / 1st year)

4. Course General Description:

This course introduces the student to the basic human nutrition, general concepts of nutrition, food component (protein, carbohydrates, fats, energy balance, vitamins, minerals and water), and study the main sources, daily requirements, physiological functions and deficiency symptoms for all nutrients.

5. Pre-requirements for this course (if any):

None

6. Co-requisites for this course (if any):

None

7. Course Main Objective(s):

At the end of this course, the student should be able to:

1. Recognize the basic concepts of clinical nutrition program.
2. Understand the food component and the daily requirements.
3. Distinguish the nutrients according to sources, physiological functions, and deficiency.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	45	100%
2	E-learning		
3	Hybrid <ul style="list-style-type: none"> • Traditional classroom • E-learning 		
4	Distance learning		





3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	30
2.	Laboratory/Studio	
3.	Field	
4.	Tutorial	
5.	Others (specify): Application	15
Total		45

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Outline the general principles of human nutrition.	K1	Lectures Class discussion Guided self-learning	Short essays exam Multiple-choice exam Presentation
1.2	Describe classification, functions and sources of each nutrients.	K1		
2.0	Skills			
2.1	Discuss the benefits of foods.	S1	Examples of case study which given in the lecture. Problem solving. Small group project research.	Exams Group work project Presentation
2.2	Differentiate between good nutrition and malnutrition.	S1		
3.0	Values, autonomy, and responsibility			
3.1	Show ability to work either alone or with team.	V1	Group work project	Rubric for presentation



C. Course Content

No	List of Topics	Contact Hours
1.	Carbohydrates: Classification of carbohydrates (monosaccharide – disaccharides – polysaccharides), (physiological functions and dietary sources)	3
2.	Carbohydrates: Digestion - absorption - regulation of blood sugar - glucose and insulin	3
3.	Protein: Nature of protein - classification of protein - essential amino acids – nonessential amino acids – nitrogen balance - protein deficiency - protein toxicity.	3
4.	Protein: Daily need - dietary sources - deficiency symptoms – digestion – absorption, proteins supplements	3
5.	Fats part 1: Lipid structures - food sources of fat - classification of lipids - chain length - dietary sources of fatty acid.	3
6.	Fats part 2: physiological functions of lipids- essential fatty acid - digestion – absorption – health problem of fats. + mid-term exam	3
7.	Vitamins part 1: Fat-soluble vitamins (vitamin A, vitamin D, vitamin E and vitamin K) study the main sources - physiological functions) + mid-term exam	6
8.	Vitamins part 2: Water soluble vitamins - vitamin C, vitamin B ₁ , vitamin B ₂ , niacin, requirements, physiological functions.	3
9.	Minerals part 1: Main sources and physiological functions.	3
10.	Minerals part 2: Main sources and physiological functions.	3
11.	Trace Elements: Physiological functions, deficiency symptoms and toxicity of Minerals.	3
12.	Water: Water intake - daily requirements - body water functions - the human water balance system - hormonal controls of water - deficiency symptoms	6
15.	Revision	3
Total		45

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Mid-term exam	6 th & 7 th	30%
2.	Group Discussion, Presentation	All weeks	20%
3.	Final written exam	17 th	50%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Gropper S.S. and Smith J.L. Advanced Nutrition and Human Metabolism, 6th Edition, 2013, ISBN: 978-1-133-10405-6 Whitney, E. and Rolfes, S. Understanding Nutrition, 14th Edition, 2021, ISBN-13: 978-1-285-87434-0
Supportive References	1. Mahan K. L. and Stump S.E. Food and Nutrition Therapy. 12th. Ed. Pub. by Saunders, an imprint of Elsevier, Canada, 2008. 2. Krause M. V. (2020). Krause's food & the nutrition care process. 15th Edition.
Electronic Materials	1. J. of Human Nutrition and Dietetics. 2. J. of Biol. Chem. 3. J. of Nutrition and Health. 4. J. of Nutr.Hosp.
Other Learning Materials	www.pubmed.gov

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classroom
Technology equipment (projector, smart board, software)	Smart board & Data show Blackboard system for E learning
Other equipment (depending on the nature of the specialty)	-

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Indirect: Course evaluation questionnaire
Effectiveness of Students assessment	Program Leaders	Direct
Quality of learning resources	Students- Peer reviewer	Direct
The extent to which CLOs have been achieved	Faculty, Program Leaders	Direct



Assessment Areas/Issues	Assessor	Assessment Methods
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify))

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	Umm Al-Qura University Council
REFERENCE NO.	851141114462/190392
DATE	22/11/1446

