Republic of Yemen

Ministry of Higher Education & Scientific Research

21 SEPTEMBER UNIVERSITY of MEDICALS & APPLIEED SCIENCES

Faculty of laboratory Medicine

Department Of Biochemistry and Molecular Biology

Course Specification of Nutrition

Course No. (03.01.317)

2023/2022

Course name: Nutrition

I. Course Identification and General Information:						
1	**Course Title:**	Nutrition				
2	**Course Code & Number:**	03.01.317				
3	**Credit Hours:**	**Theory Hours**				
		Lecture	Exercise	Practical	Credit Hours	
		2	0	0	2	
4	**Study Level/ Semester at which this Course is offered:**	3th Level / 1st Semester				
5	**Pre –Requisite (if any):**	General biochemistry				
6	**Co –Requisite (if any):**	None				
7	**Program (s) in which the Course is Offered:**	Bachelor in laboratory medicine				
8	**Language of Teaching the Course:**	English				
9	**Study System:**	semester				
10	**Mode of Delivery:**	Regular				
11	**Location of Teaching the Course:**	University Campus				
12	**Prepared by:**	Dr. Ebtesam Al- Zabedi				
13	**Date of Approval:**	2022-2023				

II. Course Description:

The Nutrition course is a comprehensive course that provides a thorough overview of the major biochemical compounds in our diets, including proteins, carbohydrates, and lipids, as well as vitamins and minerals. The focus is on the body's physiological requirements, the many functions of these compounds, and the diseases associated with dietary imbalances.

III. Alignment Course Intended Learning Outcomes with program outcomes		
III. Course Intended Learning Outcomes (CILOs)		**Referenced PILOs**
A. Knowledge and Understanding: ***Upon successful completion of the course, students will be able to:***		
a1	**Understand** the major macro and micro- nutrients relevant to human health, and understand their roles and importance.	A1
B. Intellectual Skills: ***Upon successful completion of the course, students will be able to:***		
b1	**Discuss** the major macro and micro-nutrients relevant to human health, and understand their roles and importance.	B2
C. Professional and Practical Skills: ***Upon successful completion of the course, students will be able to:***		
c1	**ANALYSIS** the major macro and micro-nutrients relevant to human health, and understand their roles and importance	**C1**
D. Transferable Skills: ***Upon successful completion of the course, students will be able to:***		
d1	Ability to transfer information of balance and health diet	**D1**

IV. Alignment Course Intended Learning Outcomes with Teaching Strategies and Assessment methods :
(A) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:

	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
a1	**Understand** the major macro and micronutrients relevant to human health, and understand their roles and importance	Lecture	Exam
(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:			
	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b1	**Discuss** the major macro and micro-nutrients relevant to human health, and understand their roles and importance.	Lecture	exams
C Alignment Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies:			
	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
c1	**ANALYSIS** the major macro and micro-nutrients relevant to human health, and understand their roles and importance	Lecture	Exam
(D) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:			
	Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1	Ability to transfer information of balance and health diet	seminar	**Discuss**ion

NO.	Units/Topics List	Number of Weeks	contact hours	Learning Outcomes (CILOs)
1	Types of nutrients of balanced diet (macronutrients, micronutrients)	1	2	a1,b1
2	Energy requirement and energy expenditure Diet and therapy	1	2	a1.b1

3	Nutritional assessment and food pyramids	1	2	a1.b1
4	Obesity (Definition, assessment, factors affecting obesity) Management of obesity	1	2	a1. b1
5	Drugs of choice for treatment of obesity	1	2	a1.b1
6	MED TERM	1	2	
7	Diabetes mellitus (DM), Nutrition therapy and recommendation for DM	1	2	a1.b1
8	Nutrition in liver disease	1	2	a1.b1
9	Nutrition in cancer	1	2	a1.b1
10	Nutrition in anemia	1	2	a1.b1
11	Nutrition in pregnancy and lactation.	1	2	a1.b1
12	Nutrition in infants and elderly	1	2	a1.b1
13	FINAL THEORTICAL	1	2	
		13	26	

V. Teaching Strategies of the Course:	
1-	Lectures
2-	Practical session
3-	Seminars

VI. Assessment Methods of the Course:	
No	**Assignment**

1	**Written Exams (Short Essays) and Quizzes**
2	Written Exams(MCQ)
3	Practical Exams (PE)

VII. Assignments:

No.	Assessment Method	Week Due	Mark	Proportionof Final Assessment	Aligned Course Learning Outcomes
1	**Midterm Exam**	8	20	20%	a1,b1,c1
2	**Practical exam**	14	30	30%	a1,b1,c1,d1
3	**Final Exam**	16	50	50%	a1,b1,c1,d1
	Total	32	100	100%	

X. Learning Resources:

1- Required Textbook(s) .

1-	Ferrier Denise. Lippincott's illustrated reviews: Biochemistry, 7th edition, Wolters Kluwer. 2017.
2-	Rodwell Victor, et al. Harper's Illustrated Biochemistry, 31th edition McGraw-Hill. 2018.

2- Essential References.

1-	Biochemistry (https://pubs.acs.org/journal/bichaw)
2-	Biochemical Journal (https://portlandpress.com/biochemj)

3- Electronic Materials and Web Sites *etc*.

1-	https://www.ncbi.nlm.nih.gov/pubmed/

	The medical biochemistry page (online textbook) : https://themedicalbiochemistrypage.org/
2-	1. MIT open courseware. Biological Chemistry I
3-	(https://ocw.mit.edu/courses/chemistry/5-07sc-biological-chemistry-ifall-2013/)
4-	2. MIT open courseware. Biological Chemistry II

XI. *Course Policies:*	
1	**Class Attendance:** Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	**Tardiness:** -If the student dose not attend for more than 6 times, the student will be obligated to withdrew from the course
3	**Exam Attendance/Punctuality:** No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	**Assignments & Projects:** Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	**Cheating:** Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	**Forgery and Impersonation:** Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	**Other policies:** The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration