

Republic of Yemen
Ministry of Higher Education & Scientific Research
21 September University for Medicals and Applied Sciences



Faculty of Clinical Pharmacy

Bachelor of Clinical Pharmacy & Pharm. D.

Course Specification of Clinical Nutrition

Course No. (02.01.211)

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

Prepared by:

Dr. Ali Alyahawi

Reviewed by:

Dr. Hassan Al Mahbashi

Head of the Department:

Dr. -----

Vice Dean for Quality affairs

Dr. Abdulelah Thabet

Dean of College:

Dr. Ali Alyahawi

I. Course Identification and General Information:

1	Course Title:	Clinical Nutrition			
2	Course Code & Number:	02.01.211			
3	Credit Hours:	Credit Hours	Theory Hours		Lab. Hours
			Lecture	Exercise	
		2	2	--	--
4	Study Level/ Semester at which this Course is offered:	4 Level / 2 Semester			
5	Pre –Requisite (if any):	Integrated Pharmacotherapy 1			
6	Co –Requisite (if any):	None			
7	Program (s) in which the Course is Offered:	Bachelor of Clinical Pharmacy & Pharm. D.			
8	Language of Teaching the Course:	English			
11	Location of Teaching the Course:	Faculty of Clinical Pharmacy			
12	Prepared by:	Dr. Dr. Ali Alyahawi			
13	Date of Approval:	2022			

II. Course Description:

This course is designed to understanding clinical nutritional problems related to parenteral and enteral therapy. The course deals with the nutritional aspects of diseases and clinical disorders by integrating students' existing knowledge of physiology, biochemistry and food science.

The student will learn the rational use of parenteral and enteral therapy, and applications of nutrition interventions for special populations.

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III. Course Intended Learning Outcomes (CILOs) : Upon successful completion of the course, students will be able to:		Referenced PILOs Learning out of program
A. Knowledge and Understanding:		
a1	Define basic nutrients and their major roles in human.	A1
a2	Describe the nutrition assessment tools, the types of nutrition supports, and their application in specialized population.	A5
B. Intellectual Skills:		
b1	Effectively assess a patient's nutrition status and requirements	B3, B4
b2	Construct a plan to the rational nutritional regimen for specialized populations	B3, B4
C. Professional and Practical Skills:		
c1	Apply a rational nutritional regimen to optimize patient nutrients.	C4
c2	Calculate the daily the nutrient requirements for an adult patient based on patient specific factors.	C4
D. Transferable Skills:		
D1	Search efficiently for required medical information in professional medical references and sites.	D1. D3.
D2	Communicate effectively and ethically with a healthcare team and patients	D1

(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- Define basic nutrients and their major roles in human.	- Lectures - Assignment - Interactive discussion - Seminars - Case discussion - Office hour	Exam Assignment Quiz
a2- Describe the nutrition assessment tools, the types of nutrition supports, and their application in specialized population.	- Lectures - Assignment - Interactive discussion - Seminars - Case discussion - Office hour	Exam Assignment Quiz

(b) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b1- Effectively assess a patient's nutrition status and requirements	- Lectures - Assignment - Interactive discussion - Seminars - Case discussion - Office hour	Exam Assignment Quiz
b2- Construct a plan to the rational nutritional regimen for specialized populations	- Lectures - Assignment - Interactive discussion - Seminars - Case discussion - Office hour	Exam Assignment Quiz

(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-Apply a rational nutritional regimen to optimize patient nutrients.	- Lectures - Assignment - Interactive discussion	Exam Assignment Quiz
C2- Calculate the daily the nutrient requirements for an adult patient based on patient specific factors.	- Seminars - Case discussion - Office hour	

(D) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
D1- Search efficiently for required medical information in professional medical references and sites.	Self-Learning Seminar Exercises	Presentation Assignment Quiz
D2- Communicate effectively and ethically with a healthcare team and patients	Seminar Instructor–student Interactive Exercises	Presentation

IV. Course Content:					
A – Theoretical Aspect:					
Order	Units/Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	Contact hours
1	Introduction to nutrition	a 1, a2	- Principles of nutrition - Macronutrients - Micronutrients, mineral trace element, and additives - Fat-soluble vitamins - Water-soluble vitamins - Nutraceuticals	3	6
2	Assessment of Nutrition Status and Nutrition Requirements	a 2, b 1, b2	- Anthropometric Measurements - Specific Nutrient Deficiencies - Assessment of Nutrient Requirements: Energy dynamics and equations - Drug–Nutrient Interactions	3	6
3	Nutrition Support Systems	a 2	- Parenteral support	1	2
4	Midterm Exam	a1, a2, b1, b2		1	2
5	Nutrition Support Systems	a 2	- Enteral support	1	2
6	Nutrition Support in specialized	a 2, b1, b2, c1, c2,	- Hepatic failure - Renal Failure - Respiratory	3	6

	populations		- Pancreatitis - Diabetes - Neonatal and pediatric support		
7	Seminars on Applications	a 2, b1, b2, c1, c2,	- On selected topics of course content	3	6
8	Final exam	a 1, a 2, b1, b2, c1, c2,		1	2
Number of Weeks /and Units Per Semester				16	32

V. Teaching Strategies of the Course:

- Lectures
- Assignment
- Interactive discussion
- Seminars
- Case discussion
- Office hour

VI. Assessment Methods of the Course:

- Assignments
- Exam
- Quiz

VII. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1	Assignment 1: Describe the most important guidelines for parenteral nutrition	a 1, a2	3 rd	2.5
2	Assignment 2: Compare between types of parenteral nutrition	a 2	5th	2.5
3	Assignment 3: Specialized Nutrition Support for COPD	a 2, b1, b2, c1, c2,	8th	2.5
4	Assignment 4: Calculate the daily the nutrient needs for Hepatic diseases populations	a 2, b1, b2, c1, c2,	12th	2.5
Total				10

VIII. Schedule of Assessment Tasks for Students During the Semester:

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Assignments and seminar	Week 3-12	10	10%	a 1, a 2, b1, b2, c1, c2,
2	Quiz1	Week 6	5%	5%	a 2, b1, b2, c1, c2,
3	Midterm Exam	Week 8	10	10%	a 1, a2, b1, b2
4	Quiz2	Week 12	5%	5%	a 2, b1, b2, c1, c2, d1,
5	Final Exam	Week 16	70	70%	a 1, a 2, b1, b2, c1, c2,
Total			100	100%	

IX. Learning Resources:

1- Required Textbook(s) (maximum two).	
1.	Sharon Rolfes, Kathryn Pinna and Allie Whitney, 2012, Understanding Normal and Clinical Nutrition, Seventh Edition.
2.	S.R. Williams, 2010. Basic Nutrition and Diet therapy, Eleventh Edition .
2- Essential References.	
1.	Ira Wolinsky, Louis Williams, 2002. Nutrition in Pharmacy Practice.
3- Electronic Materials and Web Sites etc.	
-	American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.)

X. Course Policies: (Based on the Uniform Students' By law (2007))

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: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
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.

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Vice Dean for Quality affairs

Dr. Abdulelah Thabet

Dean of College:

Dr. Ali Alyahawi

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:	Dr. Ali Alyahawi	Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

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Upon successful completion of the Course, student will be able to:

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c2	Calculate the daily the nutrient requirements for an adult patient based on patient specific factors.	C 4

D. Transferable Skills:

D1	Search efficiently for required medical information in professional medical references and sites.	D 1 . D 3 .
D2	Communicate effectively and ethically with a healthcare team and patients	D 1

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2	Nutritional Assessment tools and types	- Anthropometric Measurements - Specific Nutrient Deficiencies - Assessment of Nutrient Requirements: Energy dynamics and equations - Drug–Nutrient Interactions	3	6
3	Nutrition Support Systems	- Parenteral support	1	2
4	Midterm Exam		1	2
5	Nutrition Support Systems	- Enteral support	1	2

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6	Nutrition Support in specialized populations	- Hepatic failure - Renal Failure - Respiratory - Pancreatitis - Diabetes - Neonatal and pediatric support	3	6
7	Seminars on Applications	- On selected topics of course content	3	6
8	Final exam		1	2
Number of Weeks /and Units Per Semester			16	32

VI. Teaching & Assessment Strategies of the Course:

- Lectures
- Assignment
- Interactive discussion
- Seminars
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