Course plan

Year: 2025	**Semester:** ■ First ☐ Second, ☐ Summer	**Number of students: 6**
Major: medicine	■ Basic sciences, ☐ Physiopathology	**Department:** Biochemistry and Nutrition
Course Title: Biochemistry and Nutrition	■ Theoretical, ☐ Practical	**Credit:** **Code N.:**
Prerequisite: _____	**Day & Time:** Tuesday 15 -17	**Course type:**
Instructor:	**Office address:**	**Tel:**
Email: ammar .salehi.nut@gmail.com	**Response Hours and Days:**	**Student representative name and mobile number:**

Main objective: To familiarize students with the general principles of nutrition and its role in individual health.

After completing this course, students should be able to:

1. Understand the general effects of nutrition on health.
2. Identify the nutrients (macronutrients and micronutrients, including vitamins and minerals), their dietary sources, and the signs of their deficiency and toxicity.
3. Explain the general principles of nutrition for different population groups.
4. Describe how to develop dietary recommendations for individuals with varying needs.

References (Text books):

1- Krause's Principles of Nutrition

Student evaluation and the value related to each evaluation:

(The assessment tools that will be used to test student ability to understand the course material and gain the skills and competencies stated in learning outcomes)

ASSESSMENT TOOLS	From
Assignments	1
Quiz	-
Presence in online courses	1
Midterm Exam	-
Final Exam (Written exam)	18
TOTAL MARKS	**20**

Students responsibilities:

1- Mobile phones must be turned off during class or exams.

2- Attending class on time

3- It is necessary for the student to attend all class hours. Unexcused absence during the course will result in a grade deduction.

Discipline and educational rules:

It is applied according to the regulations of the educational regulations

Mid exam date:	Final exam date:

Row	date	Time	Topic	Professor	References	Chapter	Pages
1	Tuesday	10-12	Principles of nutrition science and human requirements for dietary biomolecules; familiarity with concepts such as DIR, RDA, adequate intake, upper limit, etc.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
2	Tuesday	15-17	Assessment of nutritional status in individuals, including anthropometric evaluations in children and adults such as BMI, body composition, skinfold thickness, MUAC, z-score concept, and growth curves.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
3	Tuesday	10-12	Assessment of dietary intake, including 24-hour dietary recall, food record, and food frequency questionnaire.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
4	Tuesday	15-17	Evaluation of food consumption at the community level and the concept of food balance sheets.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
5	Tuesday	10-12	Assessment of energy status and principles of calorimetry in nutrition; types of weight loss diets and their biochemical basis.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
6	Tuesday	15-17	Growth and nutrition.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
7	Tuesday	10-12	Nutrigenomics and the relationship between nutrition and epigenetics.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
8	Tuesday	15-17	Hormonal and neural regulation of eating behaviors, satiety and hunger, and related disorders.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
9	Tuesday	10-12	Obesity and metabolic syndrome, types of malnutrition, anorexia, cachexia.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
10	Tuesday	15-17	The role of diet in	salehi	Krause and		

			cardiovascular diseases, hypertension, diabetes, and cancer.		Mahan's Food & the Nutrition Care Process.		
11	Tuesday	10-12	Application of biochemical tests in nutritional status assessment.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
12	Tuesday	15-17	Principles of dietary therapy in metabolic diseases, dietary management in acute illness, monitoring response to treatment.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
13	Tuesday	10-12	Trace elements and their role in health and disease.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
14	Tuesday	15-17	Toxic minerals and fat-soluble vitamins in foods.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
15	Tuesday	10-12	Nutrition in athletes, dietary supplements, and their effects on performance and muscle strength.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
16	Tuesday	15-17	Nutrition during pregnancy and lactation.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		
17	Tuesday	10-12	Drug-nutrient interactions, the effect of diet on drug absorption and excretion, and the impact of drugs on vitamin and mineral status.	salehi	Krause and Mahan's Food & the Nutrition Care Process.		