Course Description Form

1. Educational Institution:
Northern Technical University / Nimrud Technical Institute
2. Academic Department:
Department of Therapeutic Nutrition Techniques
3 .Course Title:
Nutritional Epidemiology
4. Course Code:
TNT117
5. Level / Academic Year:
First / 2025-2026
6. Date of Description Preparation:
10/3/2026
7. Available Attendance Modes:
In-person
8. Total Credit Hours / Units:
60 hours (2 theoretical + 2 practical) × 15 weeks
9. Course Coordinator (All names if multiple):
Name: Ahmed Husham Hamo, Mustafa Thanoon Younis Email: mustafathanoony@ntu.edu.iq
10. Course Objectives:
• Cognitive Level (Remember & Understand): The student should identify the basic concepts of nutritional epidemiology and explain the relationship between food and chronic and communicable diseases. • Analytical Level (Apply & Analyze): The student should analyze health and nutritional statistical d for the community, and link nutrient deficiencies to the emergence of epidemics. • Evaluative and Skill Level (Evaluate & Create): The student should assess the nutritional status of population groups and propose strategic solutions and preventive programs to reduce epidemics associated with malnutrition.
11. Teaching and Learning Strategies:
• Dialogue and discussion strategy. • Brainstorming. • Self-learning.

- Assigning collaborative group work.
- Assigning reports.

12.Course Structure:

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4 Hours (1Theory+2 2 Practical)	Introduction to nutritional epidemiology, its history, and its relation to public health	Familiarization with field nutritional survey forms and their design	Presentation, explanation, Q& interactive discussion, self-learning.	Oral, written and practical daily assessments and scientific reports.
2	4 Hours (1Theory+2 2 Practical)	Basic epidemiological measures: Incidence and Prevalence rates	Calculating prevalence and incidence rates for nutrition-related diseases through applied problems	Presentation, explanation, Q& interactive discussion, self-learning.	Oral, written and practical daily assessments and scientific reports.
3	4 Hours (1Theory+2 2 Practical)	Methods of measuring and assessing food consumption at the individual and community level	Practical training on the 24-hour dietary recall form	Presentation, explanation, Q& interactive discussion, self-learning.	Oral, written and practical daily assessments and scientific reports
4	4 Hours (1Theory+2 2 Practical)	Nutritional epidemiological study designs: descriptive and retrospective studies	Analysis of a case-control study for a specific nutrient deficiency disease	Presentation, explanation, Q& interactive discussion, self-learning.	Oral, written and practical daily assessments and scientific reports
5	4 Hours (1Theory+2 2 Practical)	Longitudinal epidemiological studies (Cohort Studies) and their application in nutrition	Monitoring and reviewing longitudinal survey forms and calculating Relative Risk	Presentation, explanation, Q& interactive discussion, self-learning.	Oral, written and practical daily assessments and scientific reports
6	4 Hours (1Theory+2 2 Practical)	Epidemiology of malnutrition diseases (wasting, stunting, and micronutrient deficiencies)	Anthropometric measurement methods (weight, height, and BMI)	Presentation, explanation, Q& interactive discussion, self-learning.	Oral, written and practical daily assessments and scientific reports
7	4 Hours (1Theory+2 2 Practical)	First semester midterm exam (theoretical and practical)	Evaluation of practical skills in measuring physical and epidemiological indicators	Presentation, explanation, Q& interactive discussion, self-learning.	Oral, written and practical daily assessments and scientific reports
8	4 Hours (1Theory+2 2 Practical)	Epidemiology of non-communicable diseases related to nutrition (obesity, diabetes, heart disease)	Planning a healthy community food basket for chronic disease prevention	Presentation, explanation, Q&A, interactive discussion, self-learning.	Written examination
9	4 Hours (1Theory+2 2 Practical)	Nutritional intervention strategies and community	Simulated field visit or data analysis of a health	Presentation, explanation, Q& interactive	Oral, written and practical daily assessments and scientific reports

		immunization against food-related epidemics	institution concerned with nutritional care	discussion, self-learning.	
10	4 Hours (1Theory+2 2 Practical)	National and international policies and programs in nutritional epidemiology (WHO, UNICEF)	Preparing a presentation for a proposed community program to combat obesity	Presentation, explanation, Q& interactive discussion, self-learning.	Oral, written and practical daily assessments and scientific reports
11	4 Hours (1Theory+2 2 Practical)	The student is introduced to food safety strategies	Food Safety, types, strategies, guide lines (part 2)	Presentation, explanation, Q& interactive discussion, self-learning.	Oral, written and practical daily assessments and scientific reports
12	4 Hours (1Theory+2 2 Practical)	Assess student understanding	Discussion, review	Presentation, explanation, Q& interactive discussion, self-learning.	Oral, written and practical daily assessments and scientific reports
13	4 Hours (1Theory+2 2 Practical)	The student is introduced to methods and types of food adulteration	Food adulteration, types, purposes and objectives	Presentation, explanation, Q& interactive discussion, self-learning.	Written examination
14	4 Hours (1Theory+2 2 Practical)	Explains the concept of eating patterns The student is familiar with physical activity and fitness	Food Style, physical activity and fitness	Presentation, explanation, Q& interactive discussion, self-learning.	Oral, written and practical daily assessments and scientific reports
15	4 Hours (1Theory+2 2 Practical)	Explains food planning, its objectives, and its types	Food planning, aim and objectives, types	Presentation, explanation, Q& interactive discussion, self-learning.	Oral, written and practical daily assessments and scientific reports

3. Course Evaluation

Grade distribution out of 100 according to the tasks assigned to the student, such as daily preparation, daily oral tests, monthly or written exams, reports, etc

4. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Core textbook: Nutritional Epidemiology – Walter Willett (latest edition).
Electronic References, Websites	Supplementary resources: WHO guidelines on nutritional surveys and malnutrition classifications. Scientific journals: Journal of Nutritional Epidemiology and accredited publications in therapeutic nutrition specialization at technical universities.

رئيس القسم

د. محمد كريم

رئيس اللجنة العلمية

د. وفاء عبد الرزاق عبد الله