

Course Description Template for the subject | **Community medicine**

University/College Name	AUIQ/ College of Medicine
Subject Name	Community medicine
Academic Stage	Third Stage
Available Attendance Modes	Lecture and Discussion
Subject System	Yearly
Academic Year for Preparing this Description"	2023-2022

Community Medicine for 3rd year medical students

NB. The bulk of the principles and methods of Community Medicine is taught during the fourth year of medical program. The 4th year course consists of 95 theoretical hours and 120 hours of practical classes and fieldwork.

3.1. Specific Objectives of third year course

The course is designed to enable the student to:

1. Define statistics and list the main uses of statistics in medicine
2. List methods of data presentation and demonstrate the ability to present raw data in meaningful form
3. State the purpose of a frequency distribution and cumulative frequency distribution in describing a set of biological measurements
4. Distinguish between normal frequency distribution and skewed distribution
5. Define the mean, mode, median and standard deviation and standard error and compute each of them from grouped and ungrouped data
6. Use the standard error to compute 95% confidence limit for a mean or a proportion
7. Distinguish between the standard deviation and the standard error and give examples of the use of each
8. Select and compute necessary calculations to explore the statistical significance of a comparative qualitative and quantitative set of data
9. Interpret statements of statistical significance with regard to comparisons of means and frequencies and explain what is meant by statements such as ($P < 0.05$)
10. Explain the main pathways of metabolism of major diet components
11. Define the requirements of major human nutrients
12. Explain the nutrient requirements of special groups (e.g. pregnant woman)
13. Explain the interaction of infection and nutritional status of an individual
14. List the main approaches to assess nutritional status of population
15. List and define major nutritional diseases

3.2. Syllabus

The course consists of 30 theoretical hours and 30 practical hours. The details are shown in Table (1) below:

Table (1): detailed topics of community medicine to third year medical students

Term and main subject	Topics	Hrs
First Term:	Introduction to medical statistics	1
Medical Statistics	Summarization and presentation of	2
Tutor	Data	
	Measurement of central location	1
	Measurement of variability	1
	Introduction to sampling	1
	The normal distribution and its	1
	Characteristics	
	The confidence interval and limit	1
	Tests of significance: the Z test, the t test, and the X^2 test	4
	The concept of community diagnosis as	3
	an application of statistics in measuring	
	population health	
Sub-total		15
Second Term:	Definition of relevant terms	1
Public Health	Nutrient metabolism and requirements	3
Nutrition	Nutrition and infection	1
	Nutrition of specific groups of population	2
	Nutritional surveys and assessment of	2
	nutritional status of population	
	Selected Nutritional diseases	3
	Diet therapy and nutritional	3
	Rehabilitation	
Sub-total		15
Grand-total		30

Term	Topics	Hrs	Lecturer
Fir st Te rm	Introduction to medical statistics	1	
	Summarization and presentation of data	2	
	Measurement of central location	1	
	Measurement of variability	1	
	Introduction to sampling	1	

	The normal distribution and its characteristics	1	
	The confidence interval and limit	1	
	Definition of relevant terms	1	
	Nutrient metabolism and requirements	3	
	Nutrition and infection	1	
	Nutrition of specific groups of population	2	
Sub-total		15	
SecondTerm	Tests of significance: Z test, t test, and X^2 test	4	
	The concept of community diagnosis as an application of statistics in measuring population health	3	
	Nutritional surveys and assessment of nutritional status of population	2	
	Selected Nutritional diseases	3	
	Diet therapy and nutritional rehabilitation	3	
Sub-total		15	
Grand-total		30	

Practical: This consists of class-based desk exercise sessions, two hours each. The classes are run as one session per week for the 15 weeks during the first term. Students are divided into groups of 15-25 trainees. Each group is assigned a tutor from the Department faculty. Recently the tutors are rotating on groups to interchange expertise and experience and to reduce interpersonal variation in assessing the students.

No practical classes are organized during the second term but a demonstration exercise may be arranged.

3.3. Teaching methods

The Department of Community Medicine adopts a variety of teaching methods including:

- d. Lecture with elements of interactive teaching
- e. Small group discussions

- f. Small group desk exercises in medical statistics
- g. All available means are used to demonstrate scientific material (whiteboard, data show digital projectors, computer with LCD screens group work etc.)

3.4. Student assessment

The minimum requirement of a student to be transferred to fourth year is to achieve at least 50% of the total 100 marks assigned for the course.

The marks are distributed as follows:

- e. First term 12.5 marks based on daily continuous assessment using approved check list plus written short examinations (quizzes)
- f. Mid year written examination: 25 marks
- g. Second term 12.5 marks based on one written examination near the end of the term
- h. Final examinations (50 marks): The final examination consists of two parts; a comprehensive written examination using variety of questions (MCQ, matching, short answer questions, problems requiring mathematical calculations...etc)

Students who fail to attain the 50% cut-off mark are required to re-sit in September for comprehensive examinations similar to the final one (written and oral). Failing in the re-sit examination entails the student to repeat the academic year.

3.5. Books

1. Medical statistics by Bradford Hill
2. Medical statistics by Daniel
3. Students are encouraged to use library and internet to further acquire knowledge from available resources