

# University of Thi-Qar College of Nursing Undergraduate Program Epidemiology

1. Course title: Epidemiology

2. Course Number: (405)

3. **Credit Hours**: Total (2) hrs.

Theory (1) hrs. Lab. (2) hrs. Clinical (3) hrs.

Clinical (3) hrs

4. Course Calendar: Total (2) hours weekly of (15) weeks:

Theory (2) hrs. Lab. (-) hrs. Clinical (-) hrs.

5. Placement: Fourth Year/ First semester

**6. Course description**: The course is designed to be a synthesis of public health with the goal of promoting health and preventing disease among the community in terms of monitoring and detecting the health-related events through the use of the natural history of health condition, application of epidemiological triangle and epidemiological studies for the purpose of designing and evaluating control strategies and provision of health care services.

## 7. Course Objectives:

Upon completion of the course, the student will be able to:

- 1. To define epidemiology and related concepts.
- 2. To apply the epidemiological model and use the natural history of health

conditions for the community health benefits.

- 3. To use the prevention process for providing health care services.
- 4. To apply the epidemiological studies for the purpose of designing and

evaluating control strategies and provision of health care services.

### **8. Course Outline:**

## Part I: Introduction to Epidemiology.

- 1.1. Foundation of Epidemiology (History and Development)
- 1.2. Definition of epidemiology.
- 1.3. Purpose of Epidemiology.
- 1.4. Uses of Epidemiology.
- 1.5. Risk of Epidemiology.
- 1.6. Epidemiological Triangle.

### Part II: Natural History of Health- Related Condition and

#### Prevention.

- **2.1**. Stages of the Natural History of health Condition.
- 2.2. Disease Process and Outcome of disease.
- 2.3. prevention of Disease.
- 2.4. Stages of Prevention.

### Part III: Epidemiological of Diseases.

- 3.1. Epidemiology of Communicable Disease.
- 3.2. Epidemiology of Non- Communicable Disease.
- 3.3. Classification of the Epidemiological Disease.

# Part IV: Strategies for identifying Diseases:

- 4.1.Screening.
- 4.2. Case-Finding.
- 4.3. Surveillance.

#### **Part V: Disease Control**

- 5.1. Control of Communicable Diseases.
- 5.2. Control of Non- Communicable Diseases.

#### **Part VI: Midterm Examination**

## Part VII: Professional and Ethical Considerations in Epidemiology

### Part VIII: Epidemiological Studies.

- **8**.1. Experimental Studies.
- 8.2. Non-Experimental.

## Part IX: Epidemiology and Statistics.

- 9.1. Descriptive Statistics.
- 9.2. Analytical Statistics, interpretation of p:Value and 95% confidence intervals.

# Part X: Rates in Epidemiology

- 10.1.Prevalence and incidence Rate.
- 10.2. Mortality and Morbidity Rate.

# Part XI: Environmental and Occupational Epidemiology.

- 11.1. Environment and health.
- 11.2. Exposure and Dose.
- 11.3. Dose Effect relationship.
- 11.4. Risk Assessment and Risk management.

## Part XII: 12.1. Epidemiology of Nutrition.

12.2. Epidemiology of Accidents and injuries.

Part XIII: Project Presentation.

**Part XIV: Midterm Examination**