

السنة الثالثة – الفصل الأول  
والوبائيات والإحصاء الحيوي  
**Epidemiology and Biostatistics**  
**(3 Credit hours)**  
**0505301**

**I- Course Description**

This course has two components the theoretical part constitutes 3 credit hours and covers an introduction to descriptive and analytical epidemiology, the epidemiology of infectious and chronic diseases , transmission of infectious diseases, descriptive statistics, the theory of probability levels of significance , hypothesis testing, regression and correlation and the use of statistics in epidemiology . The practical part runs over one credit hour (2 practical hours) where students will be exposed to practical application in the field of Epidemiology and Biostatistics

**II. Course Outline**

**a. The following topics will be covered in the theoretical part to the course:**

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| 1- Epidemiology of orientation and concepts  | 2 lectures |
| 2- Measurement of Morbidity and Mortality and Risk   | 2 lectures |
| 3- Sources of Data on Community Health and selected indices of Health                        | 2 lectures |
| 4- Epidemiological studies   | 2 lectures |
| 5- Epidemiological studies   | 2 lectures |
| 6- Epidemiological of Maternal Child Health  | 2 lectures |
| 7- Epidemiological of Nutritional disease  | 2 lectures |
| 8- Epidemiological of Chronic disease  | 2 lectures |
| 9- Epidemiological of Infectious disease   | 2 lectures |
| 10- Epidemiological of Endemic disease   | 2 lectures |
| 11- Descriptive Statistics : Data Presentation   | 2 lectures |
| 12- Descriptive Statistics: Summarizing Data   | 2 lectures |
| 13- Probability , Population and Samples   | 2 lectures |
| 14- Statistical Inference : Estimation and Confidence Intervals in the One Sample Situation. | 2 lectures |
| 15- Hypothesis Testing : Comparison of Two or More Groups.                                   | 2 lectures |
| 16- Regression and Correlation   | 2 lectures |

**b. Practical applications**

**32 hours**