

COURSE CONTENTS

Course Title (Symbol and No.):	304 CMED Medical Research
Course Coordinator	: Dr.Shaik Shaffi Ahamed
Credit Hours	: 2 (0 + 2)
Contact Clock Hours	: Theoretical: 6
	Tutorials & Practicals: 40

Summary of Course contents

The student is required to plan, carry out a research and write a paper using prescribed format and protocols, on one of the important health problems in Saudi Arabia under the supervision of a staff member. Supervisors from other departments will be needed to participate because of the big number of students. The student may use the data collected in the clinical educational experience as the basis for a research paper. This is intended to promote self-education and independent learning and to help the integration between Family and Community and other clinical disciplines. It is also meant as an exercise in epidemiological methods and biostatistics. The course also involves a series of lectures that prepare the student for this task.

Specific Course Objectives

Supervised research is designed to train the student to:

1. Think epidemiologically.
2. Carry out objective literature review.
3. Plan and carry out surveys in populations the proper sampling methods.
4. Observe and record the characteristics of the units examined (e.g. Cases of disease).
5. Tabulate and analyze the data.

6. Assess the volume of the problem in the community studied.
7. Describe the pattern of distribution of the problem and its association with determining factors, and draw valid conclusion.
8. be able to suggest reasonable intervention based on the findings.

Course Outline

The course will be conducted in the form of lectures and tutorials covering the following topics:

- * Principles of epidemiological research.
- * Survey design
- * Types of study: case-control study; case-series study; knowledge, attitude and practice ... etc.
- * Practical aspects of conduct of study.
- * Protocol Development
- * Introduction to Biostatistics
- * Levels of measurement
- * Frequency distribution and graphical presentation
- * Measures of central tendency
- * Measures of dispersion
- * Binomial distribution and applications
- * Normal distribution and applications
- * Sampling distribution of sampling means
- * Sampling distribution of sampling proportions
- * Hypothesis testing
- * Student's t-test
- * Confidence Interval
- * Chi-square test
- * Sampling techniques
- * Library use and search
- * Literature Review
- * Computer skills
- * Questionnaire design

- * Computer's data collection forms
- * Computer entering data
- * Computer analyzing data
- * Writing a paper

Evaluation

A. Continuous Assessment

1. Evaluation of research protocol
2. Evaluation of the draft paper
3. Practical exercises

B. Final Assessment

1. Evaluation of the final report
2. Written Examination

Text Books

1. Practical Epidemiology, by Barker DJP.
2. Statistical methods in medical research, by Armitage,
3. An Introduction to Medical Statistics, by Martin Bland