

DISCIPLINE SPECIFIC ELECTIVE–(DSE) Epidemiology and Public Health

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course
		Lecture	Tutorial	Practical / Practice		
DSE - Epidemiology and Public Health	4	3	0	1	Class XII pass	Studied Anthropology of Health and Wellbeing

Course Objectives

- To understand the principles of epidemiology
- To learn the methods used in epidemiological research
- To understand the role of environment and human behavior in determining morbidity and mortality in communities

Learning Outcomes

- Students be able to apply epidemiological principles in field studies
- Should be able to clearly delineate the environment variables with reference to disease patterns
- Student should be able to discern and identify the psychological factors responsible for disease causation
- Student will be able to use community based participatory methods in epidemiological research

Syllabus:

45 Hours

Unit 1: Measures of Disease Burden

12 Hours

Anthropological and epidemiological concepts, measures of burden of disease, overview of epidemiology methods used in research studies to address disease patterns in different communities. Frequency distribution in terms of prevalence, incidence, rates and ratios of diseases.

Unit 2: Designs and methods of study

12 Hours

Study designs, surveillance method, assessment, prevention, and control of infectious and non-communicable, chronic diseases and lifestyle diseases: historical and contemporary cultural contexts.

Unit 3: Anthropology, Environment and Mental Health

12 Hours

Effects of socio-cultural, biological and other environmental determinants (water, air and food) on health; ecological and cultural model of population health; Social, psychological and behavioral issues in public health: factors influencing mental health and illness; Intervention strategies: assessing knowledge, attitudes and behaviors towards disease and treatment compliance.

Unit 4: Evidence based Decision Making in Public Health

9 Hours

Health policies, management, methods for monitoring the achievements of health care programs, and framework of evidence-based decision-making in public health

Practical:

30 Hours

Prepare a project report on topic related to epidemiology and public health by collecting primary data from the field area. It will include study designing, data collection, analyses and report writing.

Core Readings:

1. Gordis L. (2004). *Epidemiology*. Third edition. Philadelphia: Elsevier Saunders.
2. Edberg M. (2013). *Essentials of Health Behavior. Social and Behavioral Theory in Public Health*. Second Edition, USA: Jones and Bartlett Publishers.
3. Turnock B. (2016). *Essentials of Public health*. USA: Jones & Bartlett Publishers.
4. Lee, L. M. (eds.) (2010). *Principles and Practice of Public Health Surveillance*. USA: Oxford University Press.

Suggested Reading:

1. Kovner AR, McAlearney AS, Neuhauser D. (2013). *Health Services Management: Cases, Readings, and Commentary*. 10th Ed. Chicago, IL: Health Administration Press.
2. National Health and Family Welfare -5 Survey. Govt. of India. 2019-2021

Examination and Assessment

Examination and assessment will be carried out as per the University of Delhi guidelines and notifications issued from time to time.