



ST. XAVIER'S COLLEGE (AUTONOMOUS)

Re-accredited with 'A+' by NAAC (4th Cycle) | Affiliated to Gujarat University

DEPARTMENT OF BIOCHEMISTRY - BIOTECHNOLOGY MULTIDISCIPLINARY COURSE SYLLABUS

Multidisciplinary Course: Public Health

Course Title & Code	Credit Distribution of The Course			Eligibility Criteria	Prerequisite(s) of the Course (if any)
	Lecture	Tutorial	Practical / Practice		
BC – 2201 Public Health	3 (45 Hrs.)	1 (15 Hrs.)	0	10 + 2 from a recognized board in any stream	NIL

I. Learning Objectives

Thus, the knowledge from this course can help in the following:

- LO-1. The students can take lead in projects related to Public Health.
- LO-2. The students can be involved in policy development and its implementation.
- LO-3. Students can also go in for a career in creating awareness on issues related to Public Health.

II. Course Outcomes

By the end of the paper, a student should be able to:

- CO-1 To give a theoretical understanding of PH admits relevance with a view towards experiential learning.
- CO-2 To introduce students to the use of bio-statistics in health sciences.
- CO-3 To devise strategy for promotion of community health.
- CO-4 To understand the determinants and measures of various PH issues at local and national level.
- CO-5 To acquaint the progress, challenges and promises of PH.

III. Course Content

UNIT – 1: Prevalent Public Health Diseases

Public Health, definition, scope, core values of PH, Public health Vs medical care, Perspective on Individual health: Nutritional, socio-cultural and developmental aspects, PH issue and social issues. Epidemiology of infectious diseases and their impact, TB, polio, diphtheria, tetanus, measles, Diarrhoea, typhoid, Rabies, Diabetes, Cardiovascular diseases, Tobacco, obesity and other risk factors.

UNIT – 2: Methodology to Study Public Health

Method to study Public health, significance of statistics in assessment, sampling methods, relevance of central tendency, deviation and correlation, research design, Hypothesis testing and significance. Qualitative data collection methods: Interview, Group Discussion, Observation, Case Study, Participatory methods, Publication ethics: fabrication, falsification, plagiarism.

UNIT – 3: Public Health Organizations

Functional organization (Health Care Systems) of the Public Health system in India, Public health issues of India, Gujarat, and local area, Environmental and occupational health hazards: physical-chemical and biological, Environment health policy. Occupational diseases- prevention and control, Nutrition, Anthropometry: Height and weight measurements, skinfold Circumference measurements, BMI, WHO software: Anthroplus, Human developmental indices for public health (growth chart), mental health, health promotion, National Mental health policy of India etc.

UNIT – 4: Challenges and Prospects

Challenges in Public health delivery system: (delivery, performance, effectiveness, efficiency, and equity, solutions). Public health policy, programmes and planning, Achievements of PH in the 21st century, Universal Immunization Programme (UIP), Infectious disease control programmes, Reproductive, maternal and child health services, Water sanitation programme, nutritional interventions. Ageing: strategies to prevent diseases and promote health in elderly, health care services, Dementia, Alzheimer and other mental health conditions in older adults: its implications for families and society, career prospects in Public health.

IV. Recommended Reading Materials

1. An Introduction to Biostatistics: A manual for students in Health Sciences: P.S.S. Sundar Rao, J. Richard Prentice Hall, New Delhi, 1996.
2. Introduction to Public Health by Mary Jane Schneider, Jones Bartlet Publishers.
3. Introduction to Public Health by Raymond Goldstein, Springer Publishing co, 2015.
4. UNDP. (2013). The Human Development Report, The Rise of the South: Human Progress in Diverse World. New York: UNDP