

ONE HEALTH

MULTI FACULTY

PRE-REQUISITES : Any Graduate and Post Graduate degree related to Health sciences, Biomedical sciences, Life sciences, Environmental Sciences, Veterinary sciences and Public Health.

INTENDED AUDIENCE : Candidates with any Graduate and Post Graduate degree related to Health sciences, Biomedical sciences, Life sciences, Environmental Sciences, Veterinary sciences and Public Health and interested to work on One Health can apply.

INDUSTRIES APPLICABLE TO : Microbiology, Life Sciences, Public Health, Community Medicine, Veterinary Medicine, Policy Makers and other relevant organizations across the country would be more benefited with this course

COURSE OUTLINE :

One Health recognizes that the health of people is connected to the health of animals as well as the environment and some diseases that are shared between animals and people known as zoonotic diseases. The One Health approach supports global health security by enhancing the communication, collaboration and coordination, at the human-animal-environment interface to address shared health threats such as zoonotic diseases, antimicrobial resistance, food safety and others. In view of India emerging as a zoonotic hotspot and to combat this a holistic approach of 'One Health' has gained importance to establish links between multi-sectors involving human health, animal health and environment. This course will give you a brief history and evolution of One Health concept, its application, relevance and success. Knowledge on zoonotic diseases, current scenario of emerging and re-emerging infectious diseases, measures to control and ways to reach out to community is part of the course with alignment to public health policies. The course is designed for the students, early career researchers, clinicians and policy makers to get an insight into "One health" and its importance in view of emerging and re-emerging infectious diseases of public health importance. The key to this holistic approach is to establish linkages between the human health, animal health and husbandry, agriculture, and environment sectors.

ABOUT INSTRUCTOR :

https://docs.google.com/document/d/1PhGrGTMz5RfMjzXnvDg_RzvTGG1eqMhh/edit

COURSE PLAN :

Week 1 : Introduction to One Health

Introduction to the One Health One Medicine Concept and National & International health/public health agencies - Dr. Sanghamitra Pati
Global Health vs One Health- Dr. Pranab Chatterjee
Basics of Research Ethics- Dr. Pranab Chatterjee

Week 2 : Introduction to One Health

Integrated human and animal disease surveillance systems- Dr Nivedita Gupta,
Recent success of One Health in control of emerging infectious diseases and the application of One Health in the control of endemic zoonoses in resource-poor communities- Dr Nivedita Gupta

Week 3 : Emerging Infectious Diseases and Antimicrobial Resistance

Emerging infectious diseases- Dr Subarna Roy
Process of disease emergence and assessment of the risk factors- Dr Subarna Roy

Week 4 : Emerging Infectious Diseases and Antimicrobial Resistance

Mechanisms of pathogen cross over across species boundaries and emerging infectious disease transmission, and its relevance in the 21st century- Dr Mohan Kumar Papanna
Importance of disease detection, Identification and monitoring in public health and the gaps in current health systems approaches and importance of Genome Sequencing- Dr Mohan Kumar Papanna

Week 5 : Emerging Infectious Diseases and Antimicrobial Resistance

Introduction to disease vectors and basics of Medical Entomology- Dr. Ira Praharaj
The factors influencing an emerging disease (whether is controlled or becomes endemic/epidemic as illustrated by different emerging diseases -STDs, HIV/AIDS, avian influenza, SARS, Ebola)- Dr. Siddharth Giri

Week 6 : Emerging Infectious Diseases and Antimicrobial Resistance

Antimicrobial resistance a global threat and Importance of antibiotic stewardship program- Dr Kamini Walia
Introduction of Food Safety and Food Borne Diseases- Dr Debdutta Bhattacharya

Week 7 : One Health Application in Management of Zoonotic Diseases

What are zoonotic diseases & its role in our changing world- Dr Manju Rahi
Understanding of bacterial, viral and parasitic zoonotic diseases; critical evaluation of its control measures, awareness of local, national and global factors and Influences- Dr Manju Rahi
Biogeography of zoonosis- Dr Manju Rahi

Week 8 : One Health Application in Management of Zoonotic Diseases

The integration of human, animal and ecosystem health in the control and prevention of these diseases- Dr. Simmi Tiwari
Community engagement for zoonotic disease control in humans and animals through One Health- Dr. Simmi Tiwari

Week 9 : Applied Epidemiology & Public Health in One Health Research

Basics of Epidemiological Studies- Dr Jaya Singh Kshatri
Rapid Response system, Disaster Management and Outbreak Investigation Plans- Dr. Subarata Ku Palo

Week 10 : Applied Epidemiology & Public Health in One Health Research

Basic statistical methods and their application and the measurement of disease frequency- Dr. Srikanta Kanungo
Principles of survey design and the concepts of sampling- Dr Tanveer Rehman
Mixed method research- Dr Tanveer Rehman

Week 11 : One Health and Health Policy

Introduction to health policy- Dr Soumyadeep Bhaumik
Political and institutional challenges in implementing One Health and the importance of a unified policy to address the shared health threats of humans and animals- Dr Soumyadeep Bhaumik

Week 12 : Media & Community engagement for One Health

Risk Communication and Pandemic Preparedness- Dr. Rajni Kant
How ICMR and other Public Health Institutes tackled and managed pandemic situation in the country- Dr. Rajni Kant
Uses of different types of media for communication and impact of the media on public attitudes to disease- Dr. SubbaRao M Gavaravarapu
Role of community in disease control & ways for community engagement- Dr. SubbaRao M Gavaravarapu